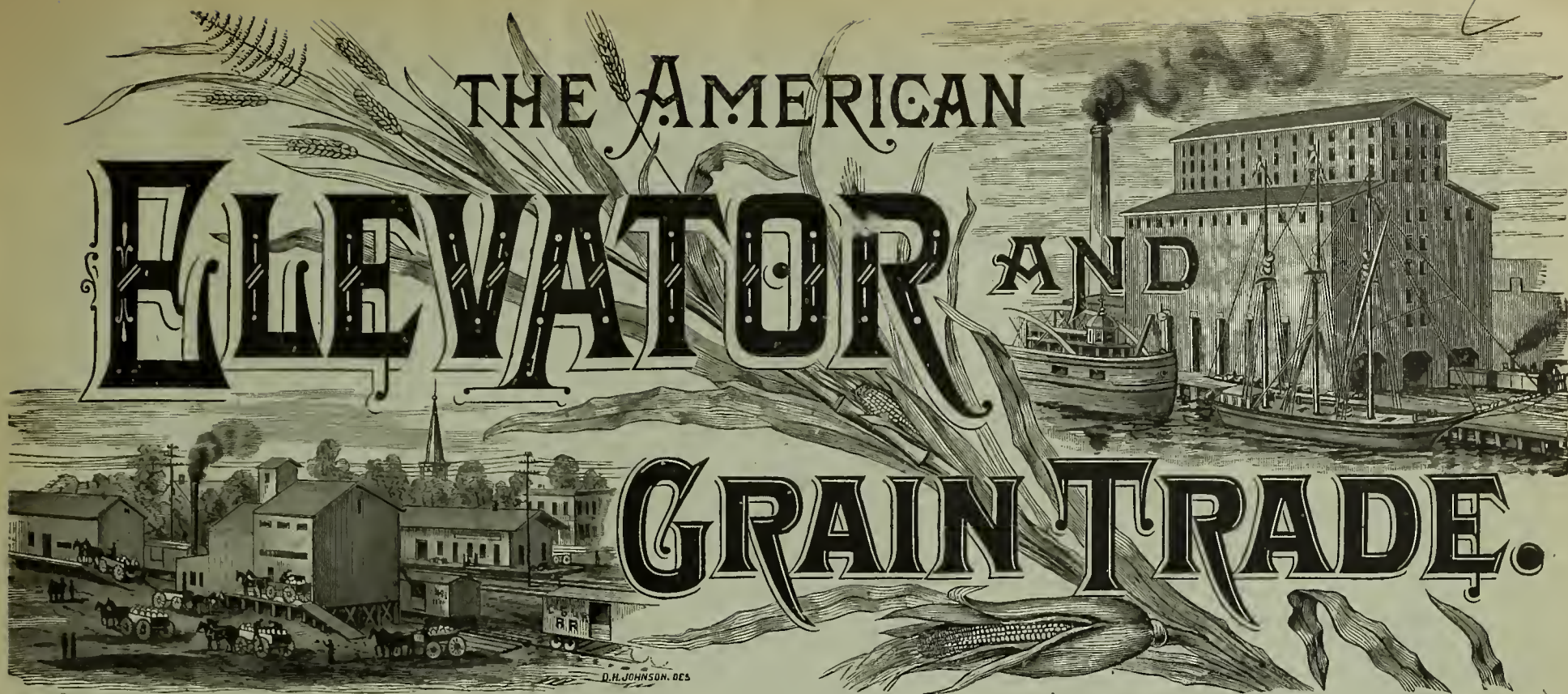


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A MONTHLY JOURNAL DEVOTED TO THE ELEVATOR AND GRAIN INTERESTS.

PUBLISHED BY
MITCHELL BROS. COMPANY,
(INCORPORATED.)

VOL. XI.

CHICAGO, ILLINOIS, APRIL 15, 1893.

No. 10.

SUBSCRIPTION PRICE,
ONE DOLLAR PER ANNUM.

THE Eureka Grain-Cleaning Machinery

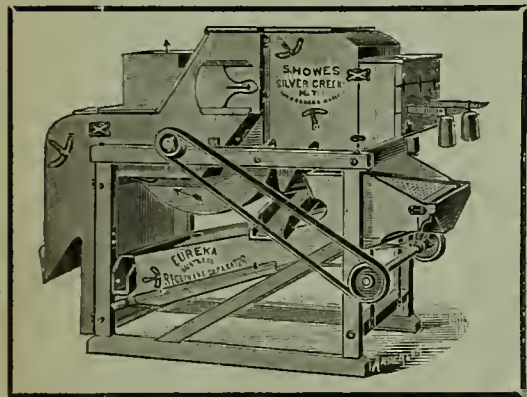
FOR ELEVATOR USE

COMPRISES

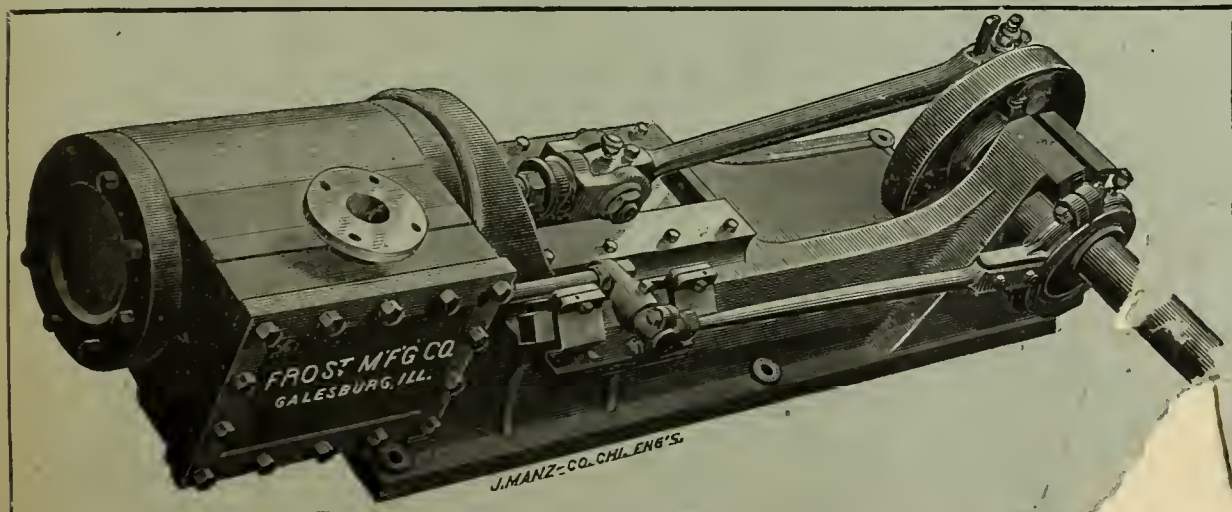
The Eureka Warehouse and Elevator Separator.
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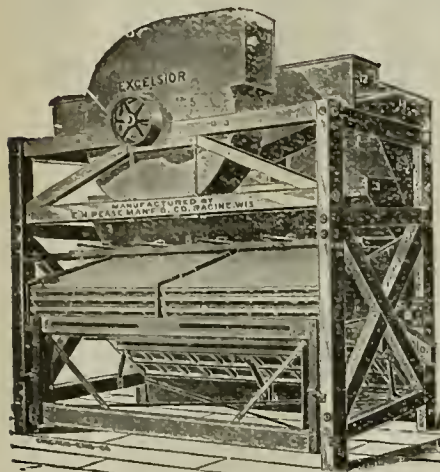
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ELEVATOR BOOTS, BUCKETS AND BOLTS,
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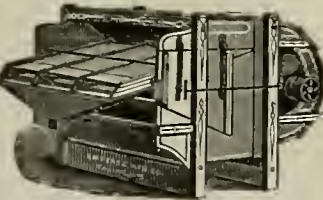
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Power Car Pullers, Oat Clippers, Dustless
Receiving Separators,
POLISHERS, SEPARATORS, GRADERS,
FLAX REELS AND SPECIAL FLAX MILLS.
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BAG-TRUCKS, WAREHOUSE TRUCKS, ETC.



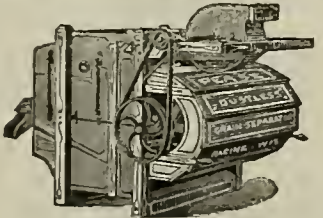
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Cleans, Separates and Grades Perfectly.
HAS NO SUPERIOR IN THE WORLD.



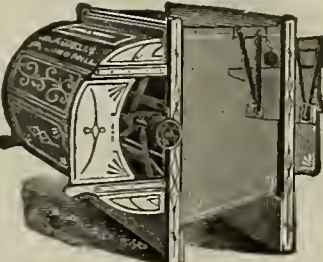
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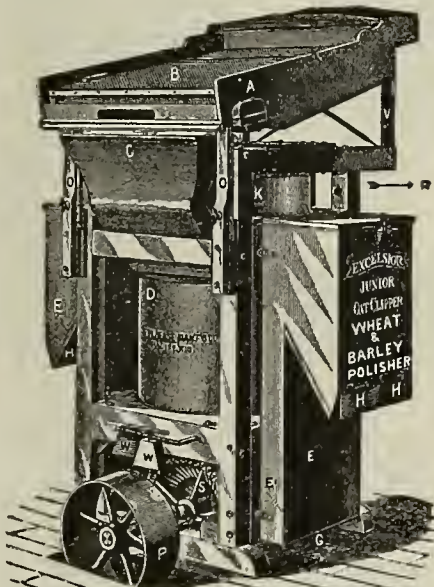


Pease Dustless Separator for Warehouses and Mills.



"Wells" Warehouse Mill.—Extra Large Capacity.

IT WILL PAY
YOU
TO GET OUR
CATALOGUES
PRICES
AND PROOFS OF
SUPERIORITY
BEFORE BUYING
ELSEWHERE.



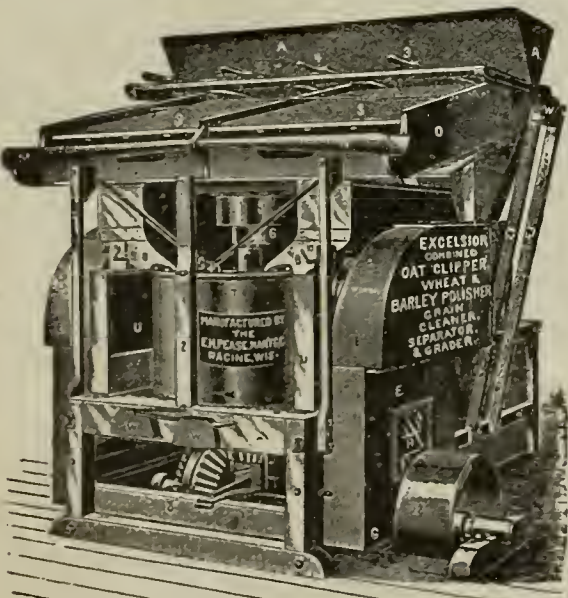
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MATERIALS USED,
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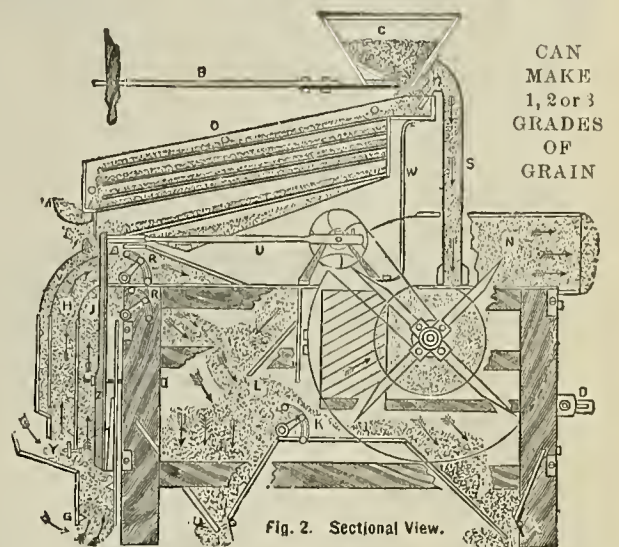
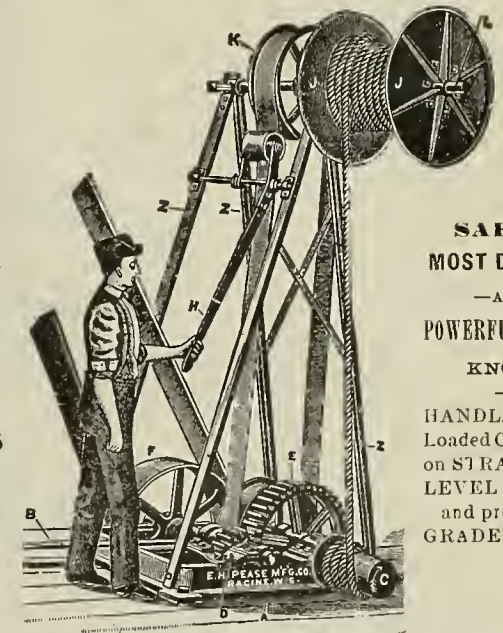


Fig. 2. Sectional View.

EXCELSIOR SEPARATOR AND GRADER.

The Finest Wheat or Barley Machine on Earth



SAFEST,
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POWERFUL PULLER
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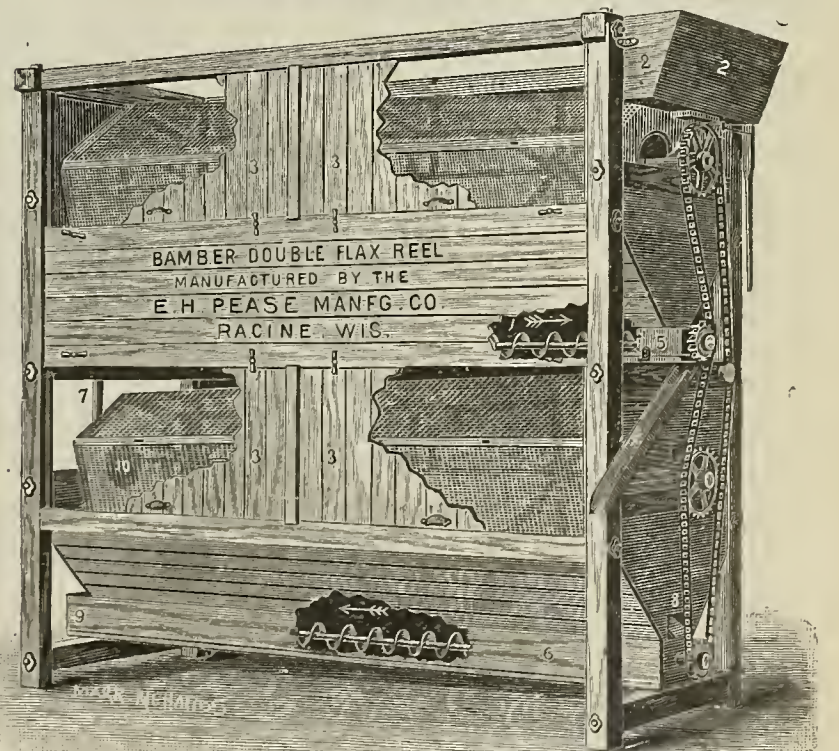
HANDLES 1 to 50
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OUR FLAX REELS

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Reels of any desired style or dimensions made to order.

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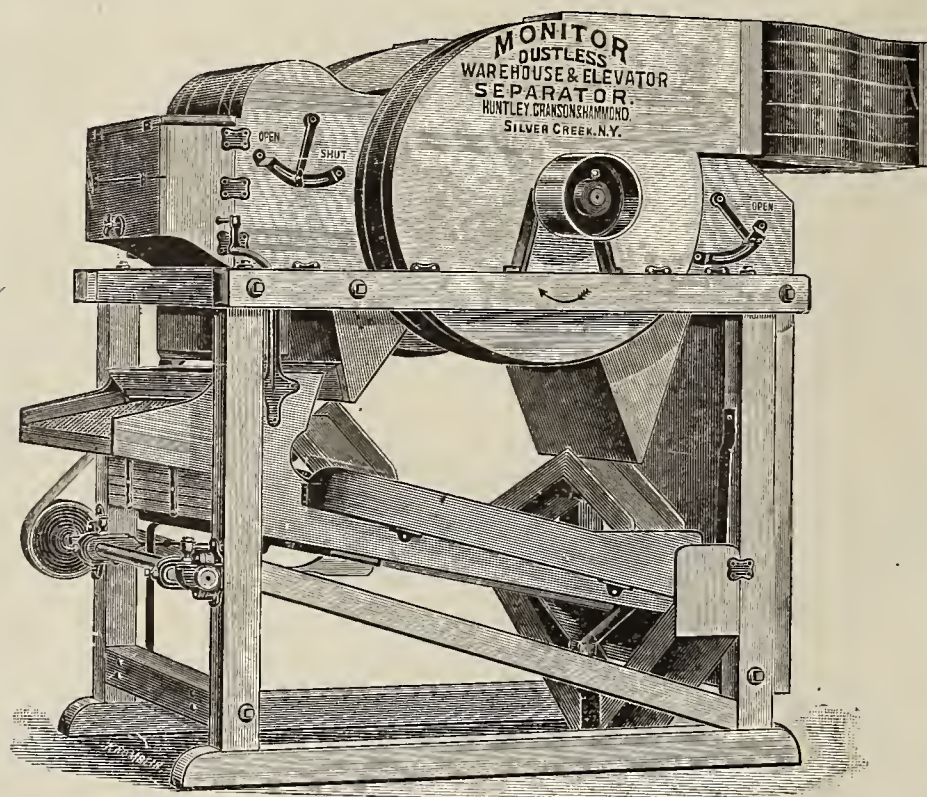
SEE OPPOSITE PAGE.

FAMOUS HAND OR POWER CLEANERS FOR COUNTRY ELEVATORS.

The Successful Combination of 3 MACHINES IN ONE.

Cleaners for Elevators

THE MONITOR



CAN BE REGULATED TO CLEAN ALL KINDS OF GRAIN,
AND DO IT JUST AS REQUIRED.

NO EXPERIMENT BUT A DEMONSTRATED SUCCESS.

The Monitor Elevator Separators are now in successful operation in a large number of the prominent cleaning elevators in this country, and in every case operators are enthusiastic in its praise.

**It is the simplest machine made for the purpose.
It takes less power than any other.
It is easier to operate, requiring less care and attention.
It is easier placed, and spouted to.**

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A COUNTRY CLEANING ELEVATOR.

Iowa has a number of first-class country cleaning houses that do a cleaning in transit business in addition to buying that offered on the local market. At one time cleaning grain in transit promised to become a very important industry in that state, but the lawmakers from Buncombe county had to keep busy, and so made a law that interfered with the business.

On this page we illustrate one of the new cleaning houses in the eastern part of the state, on the C., R. I. & P. Ry. It has recently been completed at Walcott by the enterprising firm of Stockdale & Dietz. The main building is 30x70 feet and completely covered with iron. The storage bins are built from the base floor up, the average depth of bins being 21 feet. In the lower middle section of the house is the machinery, and immediately above are the shipping bins, etc. Conveyors are used below only. In building the walls and bins a truss frame was used, and all floors, walls and partitions are lined inside and out with iron, making it practically fireproof. The owners claim that they used only about one-fourth the quantity of lumber that would have been required had they followed the usual plan of construction.

The elevator has a storage capacity for 40,000 bushels. The house contains three stands of elevators, 55 feet high, on which 10 and 12-inch elevator buckets are used. Another elevator will be put in before the next crop is marketed. Three Barnard & Leas Cleaners give a cleaning capacity of 1,700 bushels an hour. The loading track and dumps are protected by coverings. The two wagon dumps have a capacity of about 400 bushels each, and the receiving sink on side shown in cut has a capacity for a large carload. Grain is spouted from cupola to bins and is taken from the deep bins by means of two conveyors which run to the elevators.

At the east end of the elevator and apart from it is the power house, which, with coal house, covers a foundation 20x30. The power house has brick walls and roof of corrugated iron. It contains a 30-horse power boiler and a 25-horse power engine. The power is trans-

mitted by means of a 2 $\frac{7}{8}$ inch driving shaft, 53 feet long. The firm is composed of Alex. Stockdale, J. Stockdale and P. Dietz. They deal in live stock as well as grain.

ONE CAUSE OF ELEVATOR FIRES.

BY INSPECTOR.

When an elevator has been reduced to ashes and the owners and insurance adjusters are holding an inquest over the remains it is very often the case that the only in-

short piece of board which serves to connect the casings of the up and the down legs. This horizontal board also serves another purpose for which it was not intended, that is, it gathers dust. Day by day, year in and year out, this board continues to accumulate dust until it becomes packed hard. In the meantime the elevator building has been settling by reason of shifting and heavy loads of grain, carrying down with it the elevator pulley and shaft at the top. But the elevator legs with casings and the short strut board are light comparatively, and standing on the ground do not settle with the building. The pulley continually gets down closer to the strut board with its load of dust and, at last, some fine day the two come in contact sufficiently for the fast-running pulley to ignite by friction the accumulation of dust. The incipient fire is hidden from sight and is not discovered until too late.

As a preventive it would be well to hang the elevators at the head instead of setting the boots on the ground. This arrangement will also prevent friction between the elevator head and the shaft where it enters on either side. It would be well also to give the strut board a cant toward the down-going leg, thereby preventing to some extent the accumulation of dust. A periodical examination of the strut board and removal of the gathered dust would probably prevent an accumulation so great as to be dangerous. The fire risk of every grain elevator would be greatly reduced by putting a tank in the cupola and placing an

automatic sprinkler head over each elevator head. The protection afforded by this equipment would justify a reduction in the insurance rate sufficient to pay for the equipment in two years at most.

Wheat amounting to 171 bushels was imported in February, against 27,017 bushels in February last year; and during the eight months ending with February 733,211 bushels was imported, against 1,849,383 bushels in the corresponding period of 1891-2. Of foreign wheat 496,866 bushels was re-exported during the eight months ending with February, against 1,127,389 bushels during the corresponding period of 1891-2.



A COUNTRY CLEANING ELEVATOR.

formation concerning the origin of the fire is the testimony of numerous witnesses to the fact that smoke, sparks or flame were first seen issuing from the cupola. The fire started in the cupola; but how? On this point the elevator man and his help are certain that it originated through no fault of theirs. They never had any fire in the cupola, never smoked pipes or cigars, never carried naked lights, never left the windows open for sparks to float in from locomotives and never let any oily rags lie in corners to ignite spontaneously. Finally it is concluded that the cause of the fire must have been friction

Boxed up in the elevator head beneath the pulley is a

SWORN WEAIGHERS AND AUTOMATIC REGISTERS.

The importance of having sworn weighers employed on the floating elevators of the Montreal Elevating Company has been discussed before, and we believe the question has been brought before the Board of Trade and Corn Exchange Association; but it fell through on account of some objection advanced by the company's lawyer regarding its illegality. It was proposed that the weighers of the Montreal Elevating Company should be selected and sworn in by the Board of Trade so as to insure the appointment of men of integrity to such important positions of trust as weighers of grain for the public. The certificates of quantities of grain issued by these weighers are supposed to be as good as bills of the Bank of Montreal, although they have repeatedly been known to call for more grain than was actually delivered at British and Continental ports. In other words, some of these certificates, stating that so many bushels were put on board certain ocean steamers in this port, have not held out by as much as 3 per cent. when the grain was delivered on the other side. Surely, in the name of all that is right and just, our grain shippers are entitled to have some reasonable safeguards placed around the handling of their grain after it leaves their possession and goes into the temporary care of a public company which has always refused to make good the shortages that from time to time have been brought to its attention. It is true that the automatic register was introduced by the company some years ago as a check upon the weighers; but instead of being a check it proved a pure farce, for the reason that the key of the register was allowed to remain in the hands of the men on the elevators, so that these men were actually their own checkers. The great secret of this automatic register or check lies in the key being held by some disinterested party, apart altogether from the employes of the company, instead of which, one of the men on each of the elevators has had charge of the key, thus defeating the very purpose for which these automatic registers were invented. To demonstrate the uselessness of the system of automatic registers, as applied by the Montreal Elevating Company in the so-called public interest, and as a protection and safeguard against the crooked acts of some of the employes of the company, which had long been suspected, what do we find? Nothing less than a forcible confirmation of the utter worthlessness of the automatic system carried out by the above company, as a preventive of stealing. For has it not notoriously passed into history that one of the captains of the company's elevators, in whose hands the key was supposed to be kept, was caught red-handed in the act of stealing grain from the elevator, and did not Mr. James McDougall under oath state that the company took this same captain back into its employ in the following spring in the same position of trust as captain of one of the elevators, and who was supposed to have charge of the key of the automatic register? Are these things to be allowed to go on, season after season, and our grain shippers subjected to shortage after shortage, without any redress, simply because they are obliged to patronize the Montreal Elevating Company and swell the big dividends that are yearly parceled out among its fortunate shareholders? Heaven forbid! Surely our grain men should have some remedy against such frequent losses as have been sustained under the automatic register system, which was supposed to be a check upon such shortages—and would be if rightly put into practice. We repeat, that the automatic system of weighing grain, as hitherto carried out by the Montreal Elevating Company, has been a huge failure and a great mistake, as it has simply been the means of inviting wrong-doing by putting the key of the register into the hands of the very men it was intended to check. A greater incentive to irregularities it is impossible to conceive, and as a result thereof one of the captains and one of the weighers pleaded guilty to stealing grain from their respective elevators.

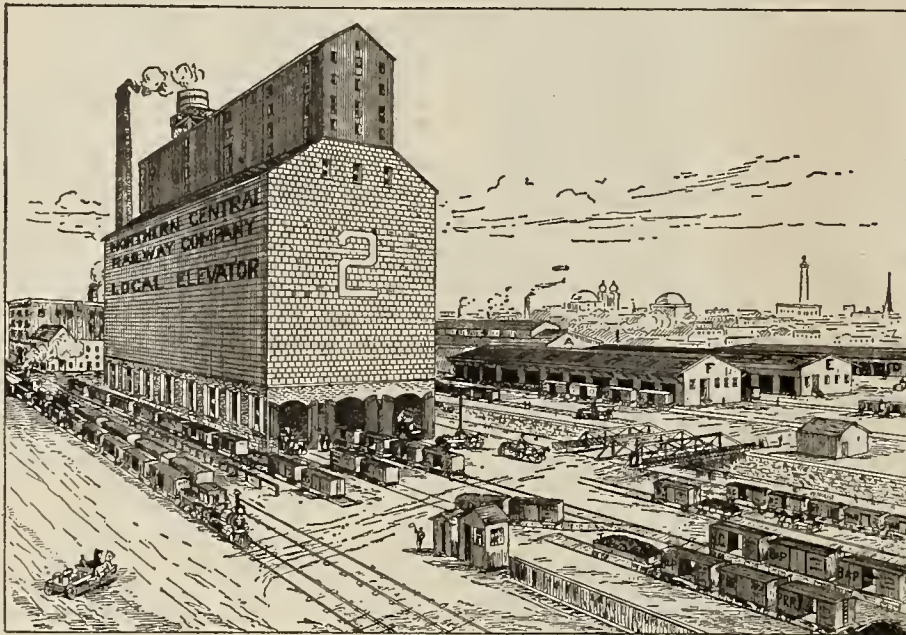
Another shipping season will commence with the opening of navigation, and what our grain shippers ask is that the Montreal Elevating Company take steps to properly apply the safeguards of the automatic registers by putting the key in the custody of some competent and dis-

interested party, instead of leaving it with the very men it is supposed to check. Our grain exporters also ask the company to consent to have sworn weighers appointed, and their fitness for such important positions of trust approved of by a board of examiners, consisting of members of the Board of Trade and Corn Exchange, the same as in the case of the grain inspector and the appointment of pilots by the harbor commissioners.—*Montreal Trade Bulletin.*

AMENDMENT OF THE INTERSTATE COMMERCE ACT.

The Department of Justice has sent copies of the act of Congress approved Feb. 11, 1893, given below, to each district attorney in the United States. It makes unusually interesting reading to railway officials and shippers, as the Supreme Court of the United States virtually drafted this bill in rendering the famous Counselman decision. The Interstate Commerce Act is stronger now than ever, and the commission has full authority to secure testimony. The amendment is as follows:

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That no person shall be excused from attending and testifying or from producing books, papers, tariffs, contracts, agreements and documents before the Interstate Commerce Commission, or in obedience to the subpoena of the commission, whether such subpoena be



BALTIMORE ELEVATOR OF THE NORTHERN CENTRAL RAILWAY.

signed or issued by one or more commissioners, or in any cause or proceeding, criminal or otherwise, based upon or growing out of any alleged violation of the act of Congress entitled, "An act to regulate commerce," approved Feb. 4, 1887, or of any amendment thereof, on the ground or for the reason that the testimony or evidence, documentary or otherwise, required of him, may tend to criminate him or subject him to a penalty or forfeiture. But no person shall be prosecuted or subjected to any penalty or forfeiture for or on account of any transaction, matter, or thing, concerning which he may testify, or produce evidence, documentary or otherwise, before said commission, or in obedience to its subpoena, or the subpoena of either of them, or in any such case or proceeding: Provided, That no person so testifying shall be exempt from prosecution and punishment for perjury committed in so testifying.

Any person who shall neglect or refuse to attend and testify, or to answer any lawful inquiry, or to produce books, papers, tariffs, contracts, agreements and documents, if in his power to do so, in obedience to the subpoena or lawful requirement of the commission shall be guilty of an offense and upon conviction thereof by a court of competent jurisdiction shall be punished by fine not less than \$100 nor more than \$5,000, or by imprisonment for not more than one year or by both such fine and imprisonment.

No rye was imported in February and none in February last year. For the eight months ending with February 143 bushels was imported, against 83,527 bushels in the corresponding period of 1891-2. No foreign rye was re-exported in the eight months ending with February, against 16,172 bushels in the corresponding months of 1891-2.

BALTIMORE ELEVATORS OF THE NORTHERN CENTRAL RAILWAY.

At present Baltimore has better facilities for receiving and handling grain than for years past. Its mileage of railroad tracks is greater and its grain storage capacity is greater. A grain blockade at that port has not occurred for a long time. Before the new elevators were erected blockades at that port were frequent.

The Northern Central Company's terminals are on the north and east side of the city. The terminals and freight stations of the Northern Central in these sections are larger than all others combined, as it is over this line that the larger part of the local freight is carried. The Canton terminals occupy several miles of water front and comprise several acres of land at the most convenient shipping point on the Patapsco.

At Center and Calvert streets are located the general offices and within a block is the main passenger station. The chief inland freight stations are also located in this vicinity. These stations cover several entire blocks, with three freight houses for general delivery. Just across a street, connected by tracks, are three more freight houses—one 330x55 feet and two 330x33 feet. There are also in this vicinity immense yards for the receipt of freight from the tracks.

Opposite the freight houses at Calvert Station stands the recently constructed elevator, known as No. 2. This elevator was built especially for trade, and has a capacity of 300,000 bushels. All the material in elevator No. 2 was cut out on the river shore near the large elevator No. 3. The frame was transported by rail in sections. The elevator is 108 feet long, 66 feet wide and 141 feet 6 inches high. It has a net storage capacity of 275,000 bushels of grain. There are three receiving and two shipping elevators, each elevator having a capacity of 7,000 bushels of grain per hour. Running lengthwise through the house are two railroad tracks for the unloading of grain from cars. There are also two wagon-ways for the shipment of grain in wagons. On the west side of the house, between it and Jones' Falls, there is a driveway. The foundations of this elevator are built of Falls Road stone capped with Port Deposit granite, and extend from solid rock 22 feet below the ground to five feet above it. The top of this masonry is a brick wall 16 feet high, from the top of which and to the eaves of the lower roof, a distance of 60 feet, the exterior wall is built of vitrified fire-

clay hollow tiles. The cupola, 30 feet wide and 108 feet long, is covered on the outside with slate. In the construction of this house there were used 273,000 feet yellow pine, 54,000 feet spruce, 25,000 feet oak, 813,000 feet hemlock and 94,000 feet of flooring. All the conveniences and precautions against fire described in Elevator 3 are placed in No. 2. Adjoining the elevator is the engine and boiler house, 38 feet square and 16 feet high above the masonry. The chimney, made of brick, is 141 feet 6 inches high.

Ira Day is superintendent of Elevator No. 2. The storage charges in force at this house are, receiving, weighing, delivery to cars or wagons, and storage for first ten days, or portion thereof, one-half of one cent ($\frac{1}{2}$) per bushel, to be paid by the consignee; each succeeding ten days or portion thereof, one-fourth of one cent ($\frac{1}{4}$) per bushel. Blowing, on delivery or in store, one fourth of one cent ($\frac{1}{4}$) per bushel.

The rules governing grain stored are as follows:

1. After grain has been inspected and graded by the Corn and Flour Exchange inspection rules, it will be stored with grain of like grade without regard to ownership. Special bins will only be assigned when it is convenient and under special agreement, and when there are good and sufficient reasons for so doing.

2. All grain stored will be at the owners' risk of loss from fire or heating, from the time it is received into the elevator until delivered therefrom.

3. Elevator certificates will be issued by the superintendent of the elevator, at his office, upon the payment of all freight and charges.

4. Grain will be delivered in quantities of not less than forty bushels, upon the payment of all charges, and the surrender of the elevator certificate properly indorsed in

ink by the party to whom issued, and also by the party surrendering the same.

5. When elevator certificates are surrendered, one order to deliver will cover as many teams as are then present, after which, an order properly signed must accompany each team, except when two or more teams come together.

6. All grain, the storage for which expires on Sunday or a legal holiday, must be removed on the preceding day; otherwise extra storage will be charged.

7. All grain received will be subject to the above rules and the conditions of the elevator certificate, and to the operations of all the provisions of the agreement between the Northern Central Railway Company, the Baltimore & Ohio Railroad Company, the Baltimore Elevator Company and the Baltimore Corn and Flour Exchange, dated March 27, 1882.

Special attention has been paid to Elevator No. 3 at

struction of this elevator there were used 834,000 feet of yellow pine, 2,231,000 feet of hemlock, 15,000 feet of oak, 134,000 feet of spruce and 343,000 feet of flooring. This elevator has a storage capacity of 1,000,000 bushels of grain. As the elevator is out in the river about 1,000 feet from the shore line, a pile and lumber trestle has been built to carry three railroad tracks to it. Two of these tracks extend lengthwise through the elevator for the unloading of grain from cars. For the speedy unloading of cars steam shovel machinery is used.

There are six elevators for receiving grain from cars and eight shipping spouts, each elevator having a capacity for 7,000 bushels of grain per hour. Surrounding the elevator there is a pile platform wharf 14 feet wide. All the roofs are covered with slate. The building is lighted throughout with incandescent electric lamps, and protected from fire by a system of iron pipes and hose extending throughout the building. As an additional

But the average time of loading an average steamer is eight to nine hours. Elevators No. 1, No. 2 and No. 3 are leased and operated by the Baltimore Elevator Company.

GRADING GRAIN IN RUSSIA.

"The commission appointed by the government to consider the advisability of instituting an inspectorate of exported cereals with a view to controlling their relative degree of purity, has definitely resolved the question in an affirmative sense. Henceforth the 600,000,000 pounds of grain (1 pound=36 lbs.) which Russia exports each year are bound to undergo cleaning, and the state will see to the rigorous enforcement of this measure. As the country is not in possession of sufficient plant to clean so enormous quantity of grain, and as these machines are not made in Russia, they must be purchased abroad. This exceptional state of affairs has even caused the gov-



BALTIMORE ELEVATORS OF THE NORTHERN CENTRAL RAILWAY.

Canton, which was put up in place of the one burned in January, 1890. It is located at the foot of Nineteenth street, Canton. An idea of the substantial character of the foundation can be gained by a glance at the stone piles that, at low tide, rise several feet above the water. These piles are 160 in number, and are built of Port Deposit granite. They rest upon a foundation consisting of wooden piles driven two feet center to center, and sawed off eighteen inches below the mean water line. On top of the piles is a double grillage of hemlock timber spiked to them. The stone piers are 6 feet by 6 feet 6 inches and 7 feet 4 inches high; 106,110 lineal feet of piling, in addition to the old piles that were under the burned elevator, and 272,500 feet of lumber for the grillage were used in the wood part of the foundation.

The elevator building proper is 242 feet long, 98 feet wide and 167 feet 6 inches high. Walls of brick extend 18 feet high from the masonry of the foundation. From the top of the brick wall to the eaves of the lower roof, the outside is built of vitrified fire clay hollow tubes. The cupola, 62 feet wide and 242 feet long, is covered on the outside with Peach Bottom slate. In the con-

precaution against fire, automatic sprinklers are used. Immediately adjoining the elevator proper is the engine and boiler house, 65 feet long, 32 feet wide and 35 feet high. It is built of brick with slate roof. In the engine house are the main driving engine, electric light engine, dynamo and the fire pumps. On the north side of the boiler house is the brick chimney, 167 feet 6 inches high. In many other ways the elevator and adjoining buildings are fitted out with all the modern conveniences that are used in elevators. Both of the above elevators were completed in the fall of 1891.

In addition to this house the Northern Central has Elevator No. 1, with a storage capacity of 500,000 bushels. This gives the Northern Central a total storage of 1,800,000 bushels. The Baltimore & Ohio has four elevators, with a total storage capacity of 4,050,000 bushels, making the city's storage capacity 5,825,000 bushels.

Canton Elevator No. 1 is situated on Pier 1, first on what is known as the Canton property. This has a transfer capacity of 125 cars in 10 hours. It accommodates two steamers to load at once, and as high as 116,000 bushels have been loaded in one steamer in six hours.

ernment to consider a proposal for the admission free of duty of machinery intended for the cleaning of cereals, so as to facilitate and hasten its importation. In any case throughout this year there will be a considerable demand from Russia for grain cleaning machines. It will soon be the same with milling machinery, which will find a ready market, owing to a scheme adopted by a syndicate of millers (which has recently been formed in the South) to export Russian cereals not in the form of grain but of flour. Seeing the advantages which would result to the country from the realization of this scheme, the Russian Government is resolved to strongly second the enterprise of the syndicate, and will not fail in taking all measures likely to contribute to the success of a work of such national importance. The exhibition of grain cleaning machinery has been enlarged by a special section for corn fans, trieurs and grain drying machines. This exhibition will take place in St. Petersburg in January, 1894."—*Messenger of the Milling Industry, St. Petersburg.*

A steam power corn-husking machine has been in successful use in Clayton county, Iowa, this winter.

FIELD EXPERIMENTS WITH CORN, 1892.

Bulletin No. 25 of the Illinois Agricultural Experiment Station gives the results of experiments with field corn, tried on the station grounds at the University of Illinois, Champaign, in 1892, with summaries of like experiments for five preceding years. The trials were made on fertile prairie soil, but without special manuring. The spring was unusually unfavorable on account of heavy rains.

Seventy-eight samples of corn with different names were tested on contiguous plats, each one-fortieth of an acre in extent. For the first time in five years the late varieties gave the largest average yields, nine such varieties averaging 70 bushels. Sixty-seven plats of medium maturing varieties averaged 68 bushels; sixteen plats of early maturing varieties averaged nearly 53 bushels. For five years past each of four medium maturing varieties has given yields of from 71 to 76 bushels per acre. The best early maturing variety has given in the same time average yield of 65 bushels per acre. For three years past the best yield by any variety was 83 bushels per acre by Boone county white. The largest yield in 1892 was almost exactly 100 bushels per acre of air-dry corn of the variety known as Piasa Queen—a variety maturing too late for Central Illinois. The trials for six years indicate that the larger medium maturing varieties give the best results. Among these the Boone county white, champion white pearl, and Burr's white represent the most satisfactory type of white, while the Leaming has given the best results among the yellow varieties. The Murdock has given the best yields of any early maturing variety, 65 bushels per acre for five years.

Excellent varieties were obtained from many different places. Extravagant claims, such as yields of 100 bushels per acre under ordinary cultivation, or that any variety worth cultivating matures in 80 or 90 days when planted at the usual time, are not to be accepted as correct. In ordinary circumstances 100 days from date of planting may be considered as a minimum for field corn to fully mature; late varieties often need more than 150 days in Central Illinois.

WILL ERECT ELEVATORS AND HANDLE RICE IN BULK.

"The hard lessons taught the rice industry of this state by the difficulties met with in marketing the very large crop of the present season are likely in the long run to prove of great advantage, and result in the adoption of reforms which the industry has long needed. The first and most important truth taught by the low prices which have prevailed is that the crop must in future be handled at a less cost.

"The rice men, who have examined carefully into this matter, have unanimously reached the conclusion that in order to cheapen the cost of handling rice the present system of shipping in sacks must be abandoned and shipments in bulk substituted.

"For some years past the percentage of the crop grown along the river has grown smaller, until now fully two-thirds of the crop are grown in what is known as the Calcasieu section. All this Calcasieu rice, as well as a good portion of the river rice, comes to market by rail. It is therefore proposed to bring the rice here in bulk, and for that purpose it will be necessary not only to erect elevators in this city, but along the principal lines of railroads traversing the rice belt as well.

"It has been announced that an elevator project is being agitated in Opelousas, and it is also proposed to erect an elevator in Acadia parish. In yesterday's *Picayune* appeared an announcement that still another country elevator was to be erected along the line of the Watkins Railroad, running from Lake Charles to Alexandria. Should these projects be pushed to completion the first steps toward handling the rice crop in bulk will have been taken, and a general change from the old method would follow as a matter of course.

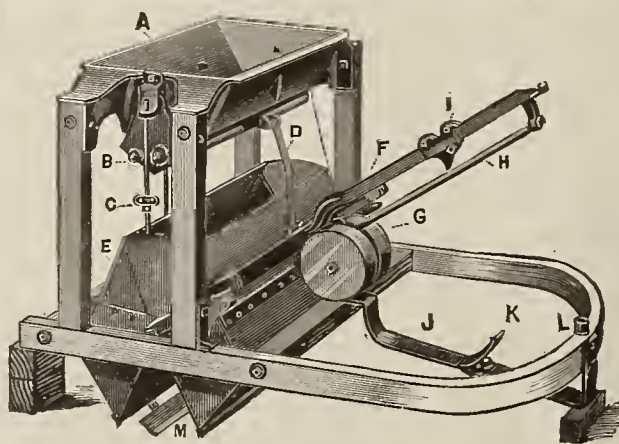
"Another lesson taught by the low prices of the present season is that efforts must be made to increase the consumption of rice in the United States. Recent investigations have proven that in a very large section of the country rice is used only as a luxury, and is sold at retail at such extravagantly high prices that the masses are offered no inducement to use it as an article of daily food. A realization of this drawback to the sale of the domestic

rice crop has led to the efforts now being made to make a splendid rice display at the World's Fair.

"It is also proposed during the coming season to prepare fancy clean rice for market in attractive packages, such as can be readily handled by the retailers, in a manner, for instance, in which oatmeal and other staple articles have been sold for years. In that way it is believed that the use of rice would be greatly extended."—*New Orleans Picayune*.

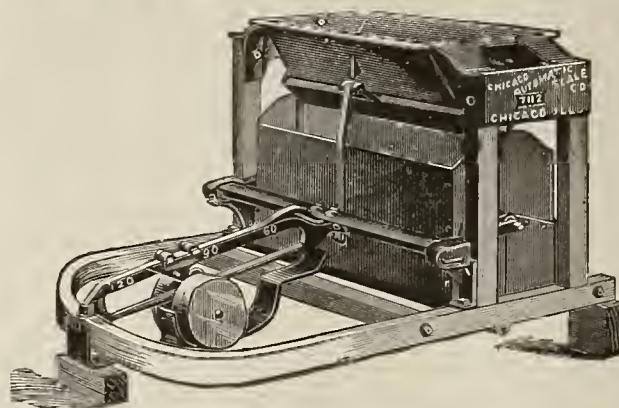
AUTOMATIC SCALES.

It is claimed that for anyone handling granular substances automatic scales present many advantages over the ordinary hopper scales, which require constant attention, cause delays, besides demanding the faithful, conscientious and unerring work of a competent bookkeeper. The advantages are too obvious to need elaboration. The United States patent records show that inventors have wrestled with the difficult problem of weighing automatically almost ever since the office was established.



SCALE IN DUMPING POSITION.

Many systems of weighing have been brought forward promising at first great success, and for a time some seemed to be so, but their inherent faults and deficiencies would come to the surface to blast the industrious inventor's hopes, as well as those of his friends and supporters. Those faults and shortcomings were mainly due to the complicated mechanism employed. Many intricate mechanical movements such as levers, triggers, toggles, catches, trips, etc., were deemed indispensable, each depended one upon the other to be actuated, the failure of



IN POSITION FOR RECEIVING.

any would stop the actions of all the others, make the result doubtful and unreliable, and at once destroy the owner's confidence in the machine.

All these points were carefully considered by the Chicago Automatic Scale Company before any attempt was made to put a machine upon the market. Eminent inventors were enlisted in its service. Invention after invention was tested, and complications were abandoned. Element after element was dropped from the combinations, until at last a machine was produced that is claimed to be "Simplicity Personified."

Even as the erudite writer and author reads and rewrites his manuscript, dropping every word that may be spared, adorning and beautifying his sentences not by superadded adjectives, but by brevity and concise expression, so has the Chicago Automatic Scale been brought to its present perfection.

It sports no catches, triggers, toggles or trips. Its actions depend simply upon the laws of gravitation. It has been tested for years under the most exacting conditions and the makers court investigation. It does the work without a dollar for repairs; never goes on a strike; never talks to some other fellow and forgets to tally. It is ever guarding the owner's interests. A sense of natural pride for personal appearance and a desire for a slight acknowledgment of difficult duties faithfully and

untiringly performed prompts the scale to require that the sides should be dusted off once in awhile, and that its face be kept clean so that the smiles may be seen as it tallies the bushels and saves the owner more dollars every year than the cost. For additional particulars apply to the Chicago Automatic Scale Company, 217 Chamber of Commerce Building, Chicago, Ill.

"REGULAR" ELEVATORS AT CHICAGO.

The policy of the Chicago Board of Trade always has been to favor the making of Chicago a market for the greatest possible quantity of produce consistent with a proper conduct of the business, which includes due regard to the rights of persons owning the property. If at any time this has not been its policy the board was then acting contrary to the declared objects of its organization, and if it has favored the running of a corner, except to the extent of insisting on the due performance of a contract, it has acted in opposition to the laws of the state and the good of its citizens. This without reference to whether a corner was attempted to be run by a member of the board or by an outsider.

Under the rules of the board any grain warehouse is declared "regular" if it be conveniently approachable by vessels of ordinary draft, and has customary shipping facilities, the proprietors or managers having good financial standing or credit and being willing to abide by the rules of the board and the laws of the state. The rule is designed to protect owners of the grain from undue charges for handling or loss from unusual delay, not to limit the quantity available for sale. Indeed, the rules expressly provide that the directors shall have power, when in their judgment an emergency exists requiring more storage room than can be supplied by the regular elevator warehouses, to declare regular for the time being any storehouse, vessels or places suitable for the storage of grain within the city limits. But this is accompanied by the proviso that the cost of delivery to vessels or railroad cars from these places shall not be greater than is made by the regular elevators for the same service. No note is made in regard to the cost of delivery to those places, that being a matter over which the board should not have control. It is for the owner of the property to decide whether or not he will pay the expense of putting it where it can be sold under the rules established for the purchase and sale of grain and other produce as "regular."

EFFECT OF CONSIGNING TO OUTSIDERS.

"Our advices from one of the largest dealers in hay in Glasgow," says the *Trade Bulletin* of Montreal, "afford food for reflection for shippers and dealers on this side. He says that the trade in Glasgow has been demoralized through prices being cut by parties who were never in the business before, but who have managed to solicit consignments from Canadian firms, and not having any connection in the hay trade in Glasgow, are slaughtering their consignments at ridiculous prices, which must be causing heavy losses to shippers. Consequently those Glasgow firms who were importing at c.i.f. prices have ceased to make further purchases at anything near the prices they were paying some time ago. The Glasgow firm above referred to says that Canadian hay is being forced on the market there as low as 70s. to 75s. per ton ex quay, and that while such a state of affairs continues it prefers to leave the trade alone. We have repeatedly referred to the folly of shippers on this side consigning their produce to outsiders in the English markets."

It is far safer and more profitable to consign only to regular commission men who are in the business to stay and advertise that fact. The irregular commission men have nothing at stake. Their reputation, like their thought of future business, is a minus quantity. They work only for the present and follow closely the motto, "Do others or they will do you."

Corn amounting to 138 bushels was imported in February, against 140 bushels in the preceding February; and during the eight months ending with February 1,668 bushels was imported, against 15,101 bushels during the corresponding period of 1891-2. Of foreign corn we re-exported none in the eight months ending with February, against 9,731 bushels in the corresponding period of 1891-2.

A PLEASANT SCENE.

Through the courtesy of the publisher of the *Great Northern Bulletin*, St. Paul, Minn., we are able to present a scene that readers will look upon with pleasure. It may be that some will covet the business of that warehouse on the hill. Although not an everyday scene the rush of grain to market in the Great Bend country of Washington frequently causes a blockade as is shown in the illustration.

With the introduction of patent dumps, without which no country elevator is complete, and better facilities for receiving and storing, the delays at elevators will be less, and the farmers happier. Washington had a large crop of wheat last year and, barring a poor yield, it will have a larger crop this year.

SHIPPING HAY.

Generally speaking, says J. K. Randles of Quincy, Ill., it is not good policy to ship two grades of hay in the same car, but there are times when it cannot well be avoided; in that case it would be best to place the best grade in one end and the lower grade in the other end of car, and notify the consignee or commission merchant of the fact so that he might sell the hay to better advantage by selling it in two lots.

Where to ship to is an important question to the shipper, especially when the markets are off or when the sup-

plies more than equals the demand, and of course we can offer no suggestion that would be of any help to the shipper, for this is a part of the business that every one must learn and decide for himself, yet we feel like saying before we leave this subject that every shipper should strive to establish a reputation for honesty and square dealing because very often a hay dealer or consumer wants a carload or more of fancy hay and is willing to pay more than the regular market price for it and the shipper of his acquaintance who can be relied upon to furnish it will get the order.

Almost all railroad companies have adopted 20,000 pounds (ten tons) as the minimum weight for a carload of hay, and shippers in order to get the advantage of car rates must pay for that amount or ship by the hundred at a much higher rate, and a press must be capable of pressing with sufficient density to load ten tons to the car without pulling the team unreasonably hard or breaking or straining the press, yet in justice to manufacturers of baling presses we will add, that, under certain circumstances, it is nearly impossible to get ten tons in a car. For instance, if the weather is exceedingly dry material cannot be pressed as tightly as when the weather is favorable; again, there is a great difference in hay, a shipper should not expect to load a car as heavy with coarse, over ripe timothy or timothy mixed with red-top, weeds, slough grass or straw as he could with prime timothy because it is the heaviest material. Any baler of hay knows by experience that when pressing stacked hay the bales will gradually get heavier toward the bottom of the stack and with the same labor of the team and press, the bales made from the bottom of the stack will outweigh the top ones by ten to twenty-five pounds. While there is a great difference in material there is even a greater in the size of cars, a 28-foot car will hold 180 to 190 bales 16x18 and 34

inches long, while a 34-foot car will hold 220 to 230 bales of the same size, this will make a difference of two tons if the bales average a hundred pounds. The longer the car the higher and wider usually, and while the shipper could under favorable circumstances get ten tons in the small car he could under almost any conditions get ten tons in the large car. The shipper of hay should have, and is entitled to, larger cars than the shipper of grain or other merchandise for it is impossible to overload a car with hay, while the "oats line," "wheat line" and "corn line" is plainly marked in grain cars indicating that the shipper must not fill above that line. It is a general practice among shippers to inform the agent that the car is wanted for hay, by this it is understood that a large sized car is wanted, and if there is any choice in size the hay shipper will get it. There is another reason why the hay shipper should have a large car, as we have said ten tons must go in a car, at least freight must be paid on that amount, and the larger the car the less the hay must be compressed to get in the required ten tons, and hay should not be pressed any tighter than is actually necessary. There is no advantage in loading more than the minimum weight for the shipper must pay for all over that amount. There is a slight saving perhaps in the expense of wire by pressing very tight, but a loose pressed bale will sell for enough more to make up the difference in the cost of wire.

To some filling the car may seem to be a very simple matter, yet, to load a car to its full capacity requires con-

GRAIN SHORTAGES AT MONTREAL.

It seems that our grain shippers are fully determined that some steps shall be taken to put a stop to the ruinous shortages that occur year after year in their grain after it is handed over to the Montreal Elevating Company, says the *Trade Bulletin* of Montreal. They have stood these losses long enough, and are bent upon finding out how their property is disposed of, even if they have to start an elevating company of their own, which, by the way, is seriously talked of in some quarters, as it is known where a number of floating elevators can be had of the newest type, and fitted up with the most approved appliances, which can be brought on here this spring. It has been suggested by others that the steamship companies give a clear bill of lading for the actual quantity of grain they receive from the elevating company. All inland craft receiving grain at Chicago are obliged to sign bills of lading for the full quantity put on board, and compelled to deliver the same quantity or pay for the deficiencies, and grain merchants here do not see why the same rule should not apply to ocean vessels. If this were done an effectual check would be put upon the elevating company. Some vexatious shortages occurred last season between the time the grain was delivered to the Montreal Elevating Company and put on board ship, while other shortages were not discovered until the grain arrived on the other side. Now, if the steamship com-



A PLEASANT SCENE.

siderable practice. If the cars were all the same size and also the bales, it would be an easy matter to tell how they should be placed in the car to the best advantage, but as the cars vary in length, eight or ten feet, and in height two feet, and in width eighteen inches, and as many sizes of bales as cars, the best we can do is to give a few general directions. Begin by building up one tier in the end of car, taking care to get them to fit snugly and using all the available space from the floor to the roof. To get the first tier built to the best advantage may cause some little trouble, for it may be necessary to take down some of the bales and place them differently, but after the first tier is made to fit, the others can all be laid up the same way. After filling one end of the car to the door, commence in the other end and leave the space between the doors until the last; when the car is full except between the doors, begin at the opposite side from where the hay is being taken at, finishing the remaining space as you work toward the other door, and of course the last few bales will have to be put in place from the outside. A small pinch bar comes very handy in loading baled hay in a car; it should be about three feet long and one inch thick, and drawn to a sharp point at one end so that it can be stuck into the floor and sides of the car and used to crowd the bales to place.

Brown county has been unable to collect from farmers for the seed wheat furnished by the state of South Dakota. The deficit amounts to \$20,000.

Flaxseed amounting to 14,086 bushels was imported in February, against 12,499 bushels in the preceding February. During the eight months ending with February we imported 41,944 bushels of flaxseed, valued at \$58,303, against 250,835 bushels, valued at \$278,076, during the corresponding period of 1891-2.

panies would give clear bills of lading for all the grain they receive, we believe it would be a very effectual means of preventing the too frequent shortages which occur at this port. But even if it should not be found practicable for the steamships to do this, surely some means can be devised for tracing where and how the shortages occur after the grain is handed over to the Montreal Elevating Company. That a portion of these losses has been due to stealing on the part of some of the company's employees is beyond doubt, and that being the case, one would imagine that the company, comprising some of the most prominent and honorable citizens of Montreal, would insist upon having sworn weighers appointed by some competent body of merchants such as that of the Board of Trade or Corn Exchange, if for no other reason than to satisfy the general desire of those merchants and shippers, from whom the company draw their large revenue, and who unfortunately have suffered too often from excessive shortages.

Flaxseed amounting to 7,083 bushels was exported in February, against 123,072 bushels in the preceding February. For the eight months ending with February 1,623,090 bushels, valued at \$1,945,572, was exported, against 3,514,491 bushels, valued at \$3,809,996, for the corresponding period of 1891-2.

Barley amounting to 236,344 bushels was imported in February, against 167,434 bushels in the preceding February; and for the eight months ending with February 1,640,583 bushels was imported, against 2,655,520 bushels for the corresponding period of 1891-2. Foreign barley amounting to 15,124 bushels was re-exported for the eight months ending with February, against 446,196 bushels for the corresponding period of 1891-2.

GOVERNMENT REPORT AT VARIANCE WITH STATE REPORTS.

The initial effort of the new Statistician of the Department of Agriculture has been presented, and as it is compiled under a "new system" there is little opportunity for comparison with former reports or for comment. It is evidently at wide variance with the state reports—more so than usual—and the difference in some cases being sufficient to make the returns somewhat doubtful. In Kansas the percentage is 12 points less, and in Michigan fully as much less. In the latter state the percentage is undoubtedly an error, as the percentages for the state by local authorities are 81, 91 and 93 in the different parts of the state, while the government reports only 74 for the state. The averages for 1893 are reported at 87 in Ohio, 74 in Michigan, 82 in Indiana, 72 in Illinois, 86 in Missouri, and 62 in Kansas, and the average for these six states is given at 74.2. The average for these states in April, 1892, is given as 77. This year Ohio exhibits an increase of 7 points, Indiana 1 point, and Missouri of 13 points, while Michigan shows a loss of 18 points, Kansas of 13 points, and Illinois 8 points. At harvest time in 1892 the percentages of these states were as follows: Ohio 81, Michigan 79, Indiana 83, Illinois 89, Missouri 85, Kansas 93, and they produced 225,796,000 bushels or 62.8 per cent. of the entire crop of winter wheat. The report regarding California is at variance with all private and newspaper reports from that quarter—the crop generally being reported excellent.—*Chicago Trade Bulletin.*

HOW THE FARMER SELLS HAY.

A Boston correspondent of the *Hay Trade Journal*, who evidently has had a little experience, claims that for ways that are dark and tricks that are vain the Eastern bucolic is peculiar. He asks: What other class of trade can mark up weights on bales 10 to 15 pounds and ask the confiding public to accept it without a grumble?

What other class can load up their bales from 10 to 25 pounds each with wood, and with the utmost simplicity tell you it is done to furnish free fuel to the poor coachmen in our cities? In their excessive love for the said coachmen, they are willing to sell their green oak wood to all buyers, whether rich or poor, for \$25 or \$30 a cord, all for humanity's sake, truly laudable.

What other class can deacon the doors of their cars with No. 1 hay, and claim the car runs the same all through "except possibly five bales, a little clover put in to fill up," when in reality three-quarters of the whole car turns out No. 2 or 3, and the draft is paid full value as No. 1, and no power on earth can get back any reclamation—because the shipper knows what hay is so much better than the consumer in the city, of course no reclamation can be allowed and the matter drops.

What other class can contract to deliver their crop at a certain price and accept advance money—then sell again to the first man that comes along that offers 25 cents more than first contract? I have heard of instances this season where farmers sold three and even four times, raking in an advance every time, exemplifying the motto that "all is fish that comes to their net." But should the market drop back a dollar or more, the highest contractor must stand up like a little man and take his medicine.

Grange farmers are all the time discussing ways and means whereby they can benefit themselves, which is right, and no one that has a spark of humanity in him can begrudge them any success they honestly win, but they should practice what they preach.

Wood is not hay and should not be sold as such. Hay will not shrink 15 or 20 pounds to the bale in one or two months' storage and should not be sold except at actual weights—and under grading is another evil that should be corrected. In any other line this way of doing business would be called dishonest.

Show me a well-to-do, thrifty country produce dealer and I will show you an upright, square dealing man every time. Very few succeed in a system of fraud and deception; they are sure to be found out and their business is gone.

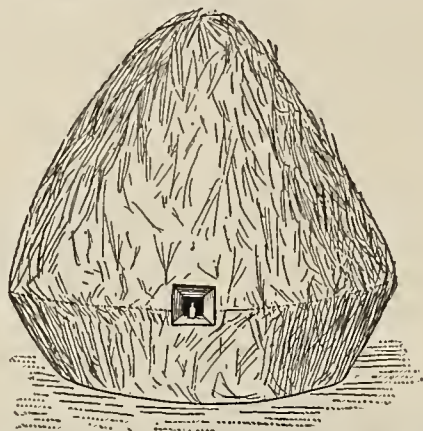
I know of shippers that have sold this season hundreds of cars of hay at contract prices delivered at Eastern points, and I will wager they have not had a claim for allowance on one car in fifty.

I know of others that are at war with every receiver they ever had business with, over differences of opinion

as to grading, weights, etc.; it's easy to see where the blame is.

DESTROYING WEEVILS IN STACKED GRAIN.

Grain elevator men whose houses have become infested with weevil and other grain insects have successfully used carbon bisulphide to exterminate them, and now the farmers have taken to using it for destroying grain insects in stacked grain. Through the courtesy of the *Prairie Farmer* we are enabled to present the illustration given herewith, which shows how the carbon bisulphide may be used in stacks. In building the stack the box as shown may be placed in and built around.



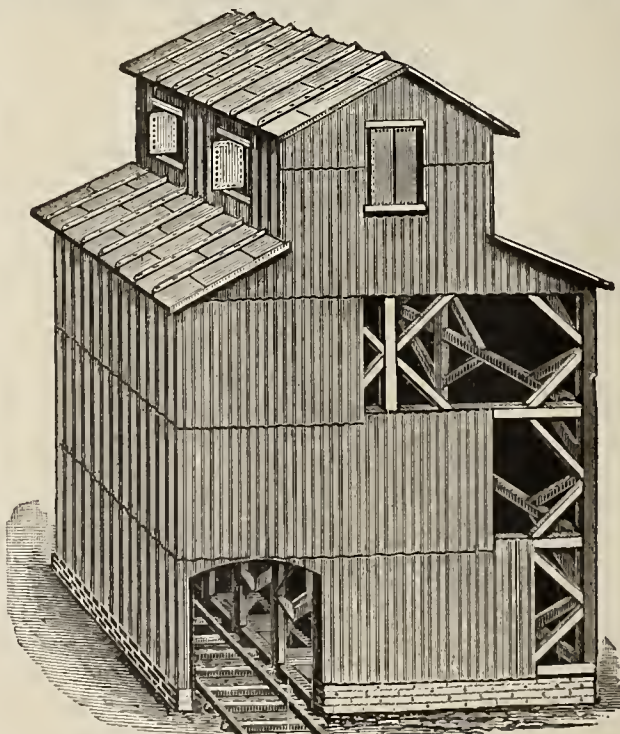
DESTROYING WEEVILS IN STACKED GRAIN.

One end of the box opens at the outside of the stack in which to push the open bottle, which is then closed by nailing on a tight fitting board. It is the best possible means for preventing the depredation of weevil, rats and mice in stacks.

The fumes of bisulphide of carbon are heavier than air, and like kerosene fumes are inflammable. Hence, in threshing, the bottle should previously be removed, corked and put in a safe place. The grade of bisulphide of carbon now manufactured by Mr. Edward R. Taylor, manufacturing chemist of Cleveland, O., has always given satisfaction, which some so-called formulas of other chemists have not.

ELEVATOR ROOFING AND SIDING.

The use of iron roofing and siding in the construction of grain elevators is increasing at a rapid rate. A few



ELEVATOR ROOFING AND SIDING.

years ago elevator men looked only at the cost of this material and few used it. As the price was gradually reduced and the merits of iron roofing and siding became better known, elevator men commenced to use it more extensively, until now few large houses are covered with anything else. Its use in the construction of small houses is also increasing, and many of those erected last year were covered with iron.

It is said that nine-tenths of the fires originate on the roof, so a fireproof roof for an elevator which is so close to the puffing engines is essential to safety. A well-known

maker of roofing claims that a slate roof weighs from five to seven times as much as an iron roof, and requires a steep, strong and costly frame to support it without breaking from shrinking of the timbers. The slate often breaks from freezing and thawing, and from heat of adjacent fires. In many states firemen are not required by law to go on a slate roof, for obvious reasons. Slate are frequently blown off and are costly to repair. They cannot be walked over without breaking while repairing gutters, chimneys, lightning rods, etc., and are not lightning proof. Driving storms force snow and rain through under the slate into the building. They contain more heat in summer and more cold in winter. When the gutters are full of ice they will leak more than any other roof. Shingles, years ago, were made of selected timber, but are now made of soft trees, limbs and old cuttings, as prime timber is more valuable for other purposes. Shingles are dangerous and fast growing in disfavor, and should never be used when iron roofs can be had at present prices. It is claimed that a building covered with iron or steel, struck by lightning, has never been known to be damaged. The bolt striking the iron or steel, scatters the electricity, leaving no damaging effect whatever.

The illustration given herewith shows an elevator covered with Sykes roofing and corrugated siding. This material is cheap, can be laid rapidly and gives reliable protection from fires without the elevator. The iron is shipped in sheets 24x96 inches, which can be cut to any length without waste of iron. When no sheeting is used as in elevator illustrated the studding must be just two feet apart from center to center. The Sykes Iron & Steel Roofing Company of Chicago and Niles, O., supplied the material to cover this elevator and will be pleased to give our readers any information they may desire regarding such material.

GRAIN ELEVATOR FOR KINGSTON, ONT.

For a long time the need of a large storage elevator at Kingston, Ont., in the interest of the grain shipping trade has been felt, and this need has grown with the erection of similar elevators at Ogdensburg until a great deal of the trade is directed to that point and shipping men and forwarders in Kingston fear that the trade there will be almost lost, writes a correspondent of the *Marine Record*. Accordingly a movement took place, the assistance of the city of Kingston was secured, capital was subscribed and \$200,000 is now ready for the erection of an elevator with a capacity of from a half to a million bushels of grain. But here an objection was unexpectedly met with. The services of an elevator expert from Chicago were secured, and this gentleman, on going over the ground, decided that the only site that would give the proper approaches and depth of water for an elevator of those dimensions was the land on which Tete du Pont barracks stand. Negotiations were opened with the government to see if the barracks could not be removed and the site granted for the purpose mentioned. The matter was taken up with vigor; resolutions were passed by the Inland Marine Association, by the Board of Trade of Kingston and by the Board of Trade of Montreal. An influential deputation visited Ottawa last week and laid the case before government officials. They offer, if the barracks are removed and the site granted, to give ten days' storage of grain free, and they pointed out that whereas navigation now closes on the St. Lawrence about November 15, vessels coming to Kingston with grain could make another trip, filling the elevator and having that amount in store for general distribution, besides giving to a Canadian port the advantages now afforded at Ogdensburg, N. Y.

New Orleans exported during March 1,111,386 bushels of wheat, 936,069 bushels of oats, and no rye, against 1,627,099 bushels of wheat, 1,607,545 bushels of corn, and 177,151 bushels of rye during March, 1892, according to the report of Robt. McMillan, chief grain inspector of the Board of Trade.

Oats amounting to 3,586 bushels was imported in February, against 1,667 bushels in the preceding February; and in the eight months ending with February 9,503 bushels was imported, against 11,168 bushels in the corresponding months of 1891-2. No foreign oats was re-exported in the eight months ending with February, against 6,025 bushels in the corresponding period of 1891-2.

NEW TRANSFER ELEVATOR AT CHICAGO.

We are pleased to inform our readers that another first-class grain transfer elevator has been erected in Chicago, and all the grain arriving over the Wabash railroad billed to Eastern points is now transferred to cars of Eastern lines at Forest Hill. In loading, the cars are well coopered, as every facility for doing this is provided. Correct weights are obtained on reliable hopper scales, which is far more satisfactory than when grain is transferred and "weighed" by grain transfer cars. Neither is the condition or quality of the grain reduced by mixture with other grains, rain, snow or hail.

The transfer elevator illustrated herewith was erected by R. E. Pratt & Co., grain commission merchants, at 76th St. and Avon Ave. It was started with the new year and has been doing good work ever since.

The building, which is covered with a slate roof and sheathed with corrugated iron, is 110x36 feet and 120 feet high. In the cribbing 2x6 planks were used. The 26 bins are 12x12x40. A 20-ft. shed covers one track on each side and the full length of the house, so that grain will not be damaged by rain, hail or sleet when being received or loaded. On the west end is a brick engine and boiler house 40x40 feet. The office of the foreman on the east end is shown in the illustration.

The elevator has a capacity for loading 150 cars of grain in ten hours, but lack of track room prevents more than 90 being transferred. Work has already been commenced on many miles of new track, so that before the new crop moves the track room will be all that could be desired. The house has a storage capacity of 100,000 bushels. The house has three receiving sinks, five elevators and five loading spouts. Three of the elevators have 20-inch buckets, and two have 12-inch buckets. Each elevator has a cut-off on top floor. The latter are used for elevating oats from clippers. Another elevator will be put in soon to elevate grain from cleaner. At each receiving sink are two power shovels.

On the first floor of the house are two Eureka Oat Clippers of 500 bushels' capacity and one No. 8 Eureka Cleaner of 600 bushels' capacity. Two more clippers will be added. Grain is transferred for the Wabash only and Pratt & Co. clean and clip only their own grain.

Grain is spouted from elevator head direct into scale hopper and from scale hopper into bin or loading spout. On the top floor are five 1,000-bushel hopper scales with Selleck's Weight Recorder attached to each beam. A beam extends from top of east end, a rope hoist attached enables them to elevate machinery to any floor. On the spout floor are incandescent electric lights attached to a long insulated wire so that bins can be lighted to bottom without danger of dust explosion or fire. On the scale floor is an office for the weighman. One weighman is employed by Pratt & Co. and one is under the supervision of the Board of Trade weighmaster. A power car puller shifts cars on either side of the house. It can pull fifteen loaded cars at a time.

In the engine house is a Westinghouse Junior Engine running a dynamo, which supplies electricity for 85 incandescent lights. A 160-horse power engine propels the machinery. One pump raises water from a 150-ft. well to the heater, and another pumps it into the boiler. Above the boiler room are two dust collectors which draw the dirt and dust from the clippers and deliver it into the furnace under the two 80-horse power boilers.

Power is transmitted to elevator heads by means of a rope drive furnished by the Webster Manufacturing Company, who also furnished the other machinery. A long distance telephone gives the house excellent facilities for communication with the down-town district. Fifteen men are employed in the house. F. W. Harrison of Fern-

wood, who has had years of experience in the elevator business, is superintendent.

THE ERIE CANAL.

Capt. M. DePuy, in a recent letter, writes as follows: A good deal of space has lately been devoted in the newspapers to the scheme of a ship canal which would connect the great lakes with the Atlantic Ocean, but it seems to me that some of these gentlemen are overlooking the old Erie Canal, which has contributed so largely to the wealth of this great state. On the sound principle that it is best to let well enough alone, the people of this state ought not to be carried away by this scheme of a ship canal.

I think that people hardly realize that the ship canal scheme proposes to make way stations of the old ports of Buffalo, Oswego, Albany and New York. We should beware of these Western gentlemen who profess to know more about New York's rivers and the general lay of the land in this state than do Ex-State Engineer and Surveyor Horatio Seymour, Jr., or the present State Engineer and Surveyor. Both of these gentlemen favor slight improvements in the Erie Canal, which can and should be made by the state without federal aid or interference.

I have owned and run steamers and consorts through

lature appropriated money to lengthen sixteen locks, and up to 1890 thirty eight locks had been lengthened, but for the last two years not a dollar has been appropriated to continue this work, and this year the appropriation bill provides for the lengthening of only one lock. As the \$70,000,000 invested in the Erie Canal has turned out to be a good investment, there ought not to be any delay in lengthening both tiers of locks between Buffalo and Albany, which can be done for \$3,000,000.

The excessive elevator charges is a subject which has often been written about. It is a fact that millions of bushels of wheat have been elevated in both New York and Buffalo for one-eighth cent per bushel. Some elevator owners frankly admit that one-fourth cent a bushel pays well for the elevating. But in spite of the laws and the court decisions, railroad grain elevators are exacting 17 10 cents per bushel over the 1/4-cent rate for elevating canal grain. On 100,000 bushels of grain this causes a loss of \$1,700. At Buffalo charges are actually more than they were before the McEvoy law was enacted in 1888 to reduce them. The improvement of the Erie Basin at Buffalo and the Albany Basin will in a measure overcome this.

It is an every-day occurrence for boats to be detained at Lockport in consequence of the water being taken out of the canal to run mills on Elghteen-Mile Creek. Only

last fall there was a crowd of boats two miles long above Lockport on account of the low water on the Rochester level, which is supposed to have eight feet of water in it, but was so low that six-foot boats could not get out of the lower lock.

At Cohoes another abuse exists. Boatmen know that it is not safe to go through the Sixteen locks at night on account of the negligence of the lock tenders. While two men are paid to be on duty often neither one is at the lock and levels are let down. The result is that hundreds of boat owners lose from eight to twelve hours rather than take chances of sinking their boats in trying to navigate in the absence of the lock tenders. This virtually means that an important part of the Erie Canal has been navigable only about two-thirds of the time during the season of canal navigation.

The needs with the Erie Canal today are: Better terminal facilities, freedom from water thieves at Lockport, men who will work on the Sixteen locks, and the lengthening of both tiers of locks between Lockport

and the Hudson River. With these improvements, it is perfectly clear that there will be no occasion for a ship canal, and, as I have shown, the cost will be indefinitely less.

"PLUGGING" GRAIN.

If the farmers who bring grain to you are unsuccessful in disguising the fact that they "plug" their load, read the following to them:

"The bottom of a grain sack is filled with good wheat. A length of stove pipe is inserted in the center of the sack and filled with the rejected wheat. The sack is then filled around the stove pipe with good wheat, and the pipe withdrawn, and on top of this is put good wheat. In this manner a neat 'plug' of rejected wheat 7 inches in diameter and 2 feet in length is inserted in the center of each sack, and is so surrounded by good wheat that it is almost impossible to detect it when dumped into the hopper, especially if the contents of a sack which has not been 'plugged' is immediately dumped on top of the contraband wheat. It is said to be a scheme which will circumvent the most eagle-eyed elevator man."

Hay, amounting to 8,702 tons was imported in January, against 6,554 tons in January, 1892; and in the seven months ending with January 46,274 tons, valued at \$426,337, was imported; against 42,340 tons, valued at \$350,281, in the corresponding period of 1891-92. Of foreign hay we re-exported none in the seven months, against 83 tons, valued at \$764, in the corresponding period of 1891-92.



NEW TRANSFER ELEVATOR AT CHICAGO.

the Erie Canal for the last sixteen years, and made seven round trips between New York and Buffalo last season. Therefore I think it will be admitted that I know what I am talking about.

As to the capacity of the Erie Canal and everything connected with it, except the locks, it will, no doubt, surprise many persons to know that the present canal is capable of passing a steamer with three consorts into the Hudson River every five or ten minutes, carrying 30,000 bushels of wheat. Estimated at every ten minutes, this amounts to:

	Bushels.
In one hour.....	180,000
In one day.....	4,320,000
In 210 days of canal navigation.....	907,200,000

There is not a boat owner in the state who does not know that a steamer with three consorts can pass a given point on the level in five minutes. As a matter of fact, it can, with its consorts, pass a given point in three and a half minutes. Thus it is shown that our imperfect locking facilities are only things that need improvement to enable the Erie Canal to move all the grain raised in the Northwest to the seaboard. This result is accomplished by utilizing the capacity of the canal lengthwise. In all canals we are limited in the capacity by the width and depth, but have unlimited capacity lengthwise.

Now, instead of operating a single boat in the Erie Canal, as was done for fifty years, we are actually running two or three and often four boats coupled together and handled by one wheelman. The trouble lies at the locks not thus far lengthened so as to admit of the passing of two boats without uncoupling. In 1887 the legis-

COMMUNICATED

[We invite correspondence from every one in any way interested in the grain trade, on all topics connected therewith. We wish to see a general exchange of opinion on all subjects which pertain to the interest of the trade at large, or any branch of it.]

SAMPLING AT TORONTO.

Editor American Elevator and Grain Trade:—The grain arriving in this market in cars is sampled by the inspector, and the charge for so doing is 50 cents per car. In case of dispute appeal can be had to the board of grain examiners of the exchange, whose decision is final.

Yours truly, EDGAR A. WILLS,
Toronto, Ont. Secretary Board of Trade.

SAMPLING AT BUFFALO.

Editor American Elevator and Grain Trade:—Grain arriving at Buffalo in cars is sampled. Our system is eminently satisfactory. The idea of sampling by a "Bureau" would not be found practicable here, as our plan works so well. With compliments,

Yours truly, WILLIAM THURSTONE,
Secretary Merchants' Exchange.

Buffalo, N. Y.

GRAIN SAMPLED BY INSPECTORS AT NEW YORK.

Editor American Elevator and Grain Trade:—Our system of handling the receipts of grain is different from that in vogue at Chicago. In that market each car is sampled and sold by sample. In our market cars are sampled by the inspectors, and all grain of the same grade goes into the elevator together, and the grain is sold by grade and not by sample, except in special cases.

Yours truly, L. B. HOWE,
Superintendent Produce Exchange.

New York, N. Y.

SAMPLING AT ST. LOUIS.

Editor American Elevator and Grain Trade:—Grain sold on track here by sample is sampled by the receivers, that is, by the consignees. Grain going into special bins in elevators is sampled by the grain inspector.

Some years since our exchange established the office of official sampler; but after a short trial it was abandoned, as it was found that the receiver preferred to take his own samples.

Yours truly, GEO. H. MORGAN,
St. Louis, Mo. Secretary Merchants' Exchange.

SAMPLING GRAIN AT BALTIMORE.

Editor American Elevator and Grain Trade:—All grain arriving at this port in cars at the several railroad depots, intended for track delivery, is sampled by regular samplers of the Exchange, appointed by the board of directors. The fee is 20 cents per car for sampling; and I can say that this system of sampling has been in vogue here for a number of years and gives very general satisfaction.

The charge made by the Exchange hardly covers the expense of sampling, but the Exchange prefers to make up the difference, as it is more satisfactory to the trade than individual enterprise. We have tried both; this we think is preferable.

Very truly yours, WM. F. WHEATLEY,
Secretary Baltimore Corn and Flour Exchange.
Baltimore, Md.

ELEVATOR DESTROYED—WILL REBUILD—ADDED FEED MILL.

Editor American Elevator and Grain Trade:—In your last issue of the AMERICAN ELEVATOR AND GRAIN TRADE it is stated among the items of "Fires, Casualties, Etc.," that the elevator of Hennen, Timm & Greves, at New Holstein, was burned, etc., which is erroneous.

The elevator of H. C. Timm & Co. and grain warehouse of H. H. Greve were burned to the ground on February 17, at 8:30 p. m., destroying 7,000 bushels of barley in Timm's elevator and 5,000 bushels of wheat and barley in Greve's warehouse. The insurance on Timm's grain and elevator was \$4,850, on Greve's warehouse and grain, \$1,845.

I contemplate rebuilding an elevator and warehouse

adjoining, on the old site. H. C. Timm & Co. will also rebuild.

Messrs. Hollensteiner & Mueller of Kiel have put in their elevator a 20 horse power Otto Gasoline Engine and a feed stone.

H. H. GREVE.

New Holstein, Wis.

GRAIN SAMPLED BY INSPECTOR AT PHILADELPHIA.

Editor American Elevator and Grain Trade:—All the sampling of grain received in cars at our market is done by the inspection department. The charge for sampling is 20 cents per car; and the system is very satisfactory to the trade in general and free from all complaints. So far as the experience of the members of this exchange is concerned they would not desire a change from the present manner of sampling.

Yours respectfully, C. ROSS SMITH,
Philadelphia, Pa. Secretary Commercial Exchange.

SAMPLING AT SAN FRANCISCO.

Editor American Elevator and Grain Trade:—Grain arriving at our market in cars is sampled either by an employe of the consignee or by the warehouse where received, without any charge. Where the grain is inspected the sampling is done by a deputy inspector of the exchange and the cost of sampling is included in the inspection charges, which are one-fourth of a cent per cental. But a very small percentage of our receipts is inspected. Our grain is virtually handled on samples of individual lots. The present system meets all our requirements.

Yours very truly, T. C. FRIEDLANDER,
San Francisco, Cal. Secretary Produce Exchange.

GRAIN AT WINNIPEG SAMPLED BY INSPECTORS.

Editor American Elevator and Grain Trade:—All the sampling of grain at this point is done by the Dominion Government grain inspector and his assistants. The system is satisfactory to the trade.

The people of this province, where the inspection of all grain is done by officials of the central government, would not stand the sampling by appointees of a commercial body; and as the trade is satisfied with the present system, I do not think there will be any change made as long as the inspection is controlled by the government.

The sampling charge is included in the inspection fee.
Yours faithfully, CHAS. N. BELL,
Secretary Winnipeg Grain and Produce Exchange.
Winnipeg, Man.

WANT THE CENTAL SYSTEM USED EXCLUSIVELY.

Editor American Elevator and Grain Trade:—We are particularly interested in the agitation in favor of the cental system in preference to computing grain by the bushel. To demonstrate the inconvenience of a complex system we will state that from this locality we pay the same freight rates to Portland, Oregon; Tacoma, Washington, and Seattle, Washington; and in making sales we of course are governed by the best quotations at the moment from either place. Portland market quotations are always given for wheat per cental and oats per bushel, while Seattle and Tacoma quotations are just the reverse, viz., wheat per bushel and oats per cental. In our local transactions we invariably have bought wheat by the bushel, and oats, barley, potatoes, onions and all other produce per cental. As far as we have used the cental system it has been entirely satisfactory, and there is no doubt it is much the best for all parties concerned, giving more freedom from mistakes in calculation, etc.

Freight tariffs are all on the cental basis, which is a strong argument in favor of the system; and it would only require a little uniformity among dealers on this coast, where the plan is already in considerable use, to make it universal. We hope to see action taken in the matter all over the country before long, and trust you will keep it before the people until it comes into general use.

We find your journal of great interest, and though it does not treat very largely of Pacific Coast interests, we should not care to be without it.

Yours truly, INKSTER BROS. & Co.
Davenport, Wash.

We are always pleased to receive for publication any news of interest to members of the grain trade.

ELEVATORS AT BUFFALO.

The following statement shows the names and storage capacity of the several grain elevators, transfers and floaters at Buffalo:

ELEVATORS.			
Name.	Capacity, Bushels.	Name.	Capacity, Bushels.
Bennett.....	800,000	N. Y., L. E. & West-ern.....	720,000
Brown.....	250,000	Niagara A.....	800,000
City A.....	600,000	Niagara B.....	1,200,000
City B.....	800,000	Niagara C.....	200,000
C. J. Wells.....	550,000	Ontario.....	450,000
Coatsworth.....	1,200,000	Queen City, A, B and C.....	450,000
Connecting Terminal	950,000	Richmond.....	250,000
Dakota.....	850,000	Schreck.....	50,000
Erie Basin (unused)	.....	Sternberg (unused).	.....
Erie Canal (Black	140,000	Sturges.....	300,000
Rock).....	400,000	Swiftsure (unused).	.....
Evans.....	500,000	Union.....	130,000
Exchange.....	650,000	Watson.....	600,000
Frontier.....	65,000	Wheeler.....	350,000
Flax Seed.....	.....	Wilkeson.....	400,000
International (Black	650,000	William Wells (un-	.....
Rock).....	600,000	used).....	.....
Kellogg.....	.....	Lyon (unused).....	.....
Lake Shore (unused)	.....	Marine.....	125,000
Marine.....	125,000	National and Globe	.....
National and Globe	100,000	Mills.....	100,000
Mills.....	100,000		
		Total 36 elevators.	15,130,000

TRANSFER TOWERS.

Horton.....	Northwest.....
Hefford.....	Western Transit.....
Chicago.....	
Fulton.....	Total, 7 transfers.
Merchants'.....	

FLOATERS.

Cyclone.....	Ira Y. Munn.....
Buffalo.....	Marquette.....
Free Canal.....	
Free Trade.....	Total, 6 floaters.

The table shows a total elevator storage capacity of 15,130,000 bushels of grain; but it may be noted that about 20 per cent. should be deducted from this capacity for storage of remnants, working room and elevators out of repair. The estimated cost of the elevators, transfers and floaters is over \$9,000,000. The transfer capacity for each twenty-four hours would probably aggregate 4,500,000 bushels, that is to say, there are facilities for receiving from lake vessels and railroads and transporting to canal boats and cars daily the quantity named from the forty-nine elevators, transfers and floaters. Of the above list the Connecting Terminal, Kellogg, Ontario, Bennett, Niagara B, Dakota, Wilkeson and Evans each have two marine legs. The Terminal, Kellogg and Bennett each have one portable leg, which enables them to work in two hatches of any vessel at the same time. The City B also has a portable leg, which may be worked in connection with a stationary leg of City A.

NEW YORK CITY HAY GRADES.

Prime or Choice Hay—Shall be pure timothy, properly cured, bright, natural color, sound and well baled.

No. 1 or Good Hay—Shall be timothy, not more than one quarter ($\frac{1}{4}$) mixed with "red top" and "blue grass" and one-eighth ($\frac{1}{8}$) clover, properly cured, bright color, sound and well baled.

No. 2 or Medium Hay—Shall include all timothy not good enough for No. 1, proportionately mixed with blue grass, red top and clover, sound and well baled.

No. 3 or Shipping Hay—Shall include all hay not good enough for other grades, and may be natural meadow, free from wild or bog, and must not contain over one-third clover, sound and well baled.

Clover Mixed Hay—Shall include all hay containing not over two-thirds ($\frac{2}{3}$) clover and one-third timothy, properly cured, sound and well baled.

Clover Hay—Shall be medium grown, properly cured, good color, sound and well baled.

No Grade or Rejected Hay—Shall include all hay badly cured, musty, stained, or in any way unsound.

STRAW.

No. 1 Rye—Shall be clean, bright, long rye straw, pressed in bundles, sound, well and securely baled.

No. 2 Rye—Shall be clean, bright rye straw, sound, well and securely baled.

Oat Straw—Shall be clean, bright oat straw, sound, well and securely baled.

Barley malt amounting to 65 bushels was imported in February, against 680 bushels in the preceding February; and during the eight months ending with February 2,491 bushels, valued at \$3,138, was imported, against 4,126 bushels, valued at \$4,748, during the corresponding period of 1891-2.

WEIGHTS FOR SELLING GRAIN IN THE UNITED KINGDOM.

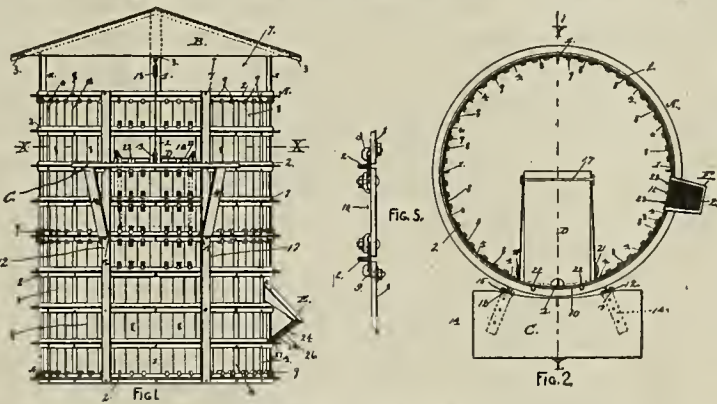
The Committee of the House of Commons (Mr. Jasper Moore, chairman) appointed to consider the question of the present system, or rather systems, of selling grain in the United Kingdom, have recently held several sittings in London. The evidence of a large number of representative witnesses from different parts of the country has been heard. The witnesses have embraced farmers, dealers, millers and others interested in the buying and selling of grain, and naturally their views have varied a good deal. Many have advocated the cental system, others have expressed themselves in favor of the Scotch system of weight and measure, while third parties have inclined to modifications of one or other or both of these systems.

From England the witnesses included Mr. Temperley of the Newcastle Farmers' Club; Mr. Woodward, ex-president of the Liverpool Corn Trading Association; Mr. Scriven of the Warwickshire Chamber of Agriculture; Captain Symonds of the Berks and Oxford Chamber of Agriculture; Mr. C. H. Ware of Stroud; Mr. Parker, a Gloucestershire miller, and others. Mr. Temperley said the practice in Newcastle Market was to sell by weight only. Northumberland had several different systems, the old boll of 6 bushels in the north, the new boll of 2 bushels in the south and the 5 bushels in the Hexham district. He was in favor of a standard weight for each description of grain. The club which he represented was, however, in favor of the hundredweight, rather than the cental, for all kinds of corn. Uniform weight ought to be established all over the kingdom. Mr. Woodward stated that in Liverpool they had used the cental for thirty-five years, the system having been used as far back as 1858. It arose from a bill of a similar kind to that before the committee having been introduced into the House of Commons. The system was not solely in the interest of the American trade. In California they bought by the cental; but they sold by the 500 pounds (or quintal) in order to meet the British quarter. In the Western States they sold by the bushel at 60 pounds. It was absurd to say that English wheat could not be sold by weight. The Liverpool trade by the cental extended to Carlisle, Cardiff, Oxford, Leicester and Hull, so that within all this area growers and merchants alike were familiar with the cental. Farmers were acquainted with it, but they did not sell by the cental, because they did not see the advantage of it. It was not used in Mark Lane; in fact, there was the greatest opposition to it. The cental was partly used in Leeds and in Birmingham. If the farmers once took to it, they would be sorry to go back. If parliament made an alteration, it should be on the idea that measure had nothing to do with the sale of corn. Mr. E. Scriven was also in favor of the sale of all kinds of grain by weight, while Captain Symonds informed the committee that his chamber had come to a like conclusion, and said it was important to have uniformity of system all over the country. Much inconvenience arose through the existing practice, under which corn was quoted at 60 pounds per bushel, while it was constantly selling at 62 pounds and 63 pounds. He would like to see the standards fixed at 60 pounds a bushel for wheat, 50 pounds for barley, and 40 pounds for oats, so that the system might be brought into accord with the decimal system. He had been told by schoolmasters that one year would be saved in the education of the rising generation if arithmetical calculation were simplified by the introduction of the decimal system. Farmers would soon become accustomed to that system, and they would then be able to compare the prices of grain at all the markets in the country. Mr. C. H. Warne said the sale of oats by weight might be misleading as to value, but the Gloucester Chamber of Agriculture, on whose behalf he spoke, were in favor of applying the cental as the standard weight of all kinds of grain. Mr. Parker said he also was in favor of the sale of grain by weight, but it should be the existing system of weight. The cental would simply produce confusion. In his judgment the returns of corn and grain were a perfect farce, because the figures were often duplicated and triplicated.

From Scotland the witnesses included Mr. Gulland, corn merchant, Edinburgh; Mr. McDougall, secretary of the Glasgow Grain Trade Association; Mr. John Williamson, farmer and dealer in grain, Langlands, Kirkcudbright; Mr. Copland, manager of the Commercial Com-

pany, Aherdeen, and Mr. W. Tasker, farmer, Camno, Meigle, Forfarshire. Mr. Gulland stated that the practice in Edinburgh was to sell corn by the imperial quarter, and the same practice prevailed in the surrounding counties. Further north, in Fife, Forfar and Perthshire, sales took place by samples on the basis of the natural weight. Uniform practice by law of sale by weight would not, in his opinion, be an advantage. He would not like to see it applied to Scotland. Mr. McDougall was in favor of the hundredweight as the unit of corn sales.

Mr. John Williamson said their system in the south of Scotland was a combination of weight and measure, although weight was the leading consideration. He bought wheat by the 62 pounds, barley by the 56 pounds and oats by the 42 pounds. These were the three staple weights of the district. He invariably formed his own opinion from the sample, and he paid a corresponding price. The grain was, of course, weighed up to the figures he had stated, or reduced as the circumstances required. The Glasgow market was almost wholly a foreign grain market. Very little native-grown grain went into it. Naturally, foreign grain was sold by weight. It really did not matter whether all barley was sold at 50 pounds; the question was that of price. Any brewers with whom he dealt would refuse to take barley unless it was a great deal more than 50 pounds per bushel. They insisted on it being 56 pounds. He did not think it would give the farmer any advantage in the purchase of feeding stuffs to have them all weighed by a uniform measure of 100 pounds. It was only a matter of calculation for the farmer. If there were a uniform weight, it would be a simple process to have the hundredweight and ton rather than the cental. If an act of



A PATENT GRAIN BIN.

Parliament were passed he had no doubt the people of Scotland would conform to it, but they were satisfied with the present system, and desired no other. Mr. Copland said the Aherdeenshire farmers, dealers and millers were satisfied with the existing system of buying and selling grain, and did not want any change. They most decidedly wanted to be let alone in this matter. He did not see that any advantage would arise to the north of Scotland by the adoption of a uniform standard, whether the hundredweight or the cental. If they had a standard weight they would put away natural weight altogether, putting in its place weight pure and simple. In selling to Edinburgh, Newcastle, Hull or London they quoted the natural weight. The principal millers of the county had asked him to represent their decided objection to any change.

Mr. Tasker said he had heard opinions expressed by farmers and grain merchants in his district, and had found them to agree with him in favor of selling by weight—the hundredweight or the cental being the standard, but the hundredweight by preference. He did not think there would be any great difficulty in carrying out a uniform weight in Scotland. He could not tell if they would get over the opposition of Aberdeenshire, or of Edinburgh and Leith. The chairman, in the course of this witness' evidence, read a letter he had received, stating that the Mid Lothian Oatmeal Millers' Association and the Leith Millers' Association were in favor of the existing system, and strongly opposed to the introduction either of the hundredweight or cental. Mr. Tasker, continuing, submitted that a uniform system would be of great advantage to farmers generally, as it was calculated to avoid friction in buying and selling. He would prefer one weight for all grains rather than different weights for different grains.

From Ireland the leading witness was Col. Waring, M. P., who said that the practice in the north of Ireland was to sell by the hundredweight of 112 pounds, or the stone of 14 pounds. In other parts they sold by the

barrel (which consisted of 14 stone for barley and 16 stone for wheat), which was much the same as selling by the hundredweight. This practice was the outcome of experience rather than of legislation, and he had heard no objection made to it. He could see no objection to the cental if it were once adopted; but there might be some difficulty in the adoption.

As is shown by the foregoing a greater variety of weights and measures is used in the marketing of grain in the United Kingdom than in the United States. Efforts have repeatedly been made in each country to secure uniformity throughout the land, but in vain. The champions of the cental and the hundredweight have been persistent and active and have plainly pointed out the many advantages of the decimal system of weights. The cause is continually gaining friends in both countries, and it is to be hoped that one will soon take the lead in bringing about the adoption of a simpler system of weights for marketing grain.

A PATENT GRAIN BIN.

Thomas E. Murray of Albany, N. Y., has invented a cylindrical bin for the reception, storage and delivery of large quantities of grain or other material.

The building resembles a railroad water tank with a conical roof, only on a much larger scale. The upright planks composing the lining are bound together with hoops of heavy T-iron. As shown in Fig. 1, given herewith, the roof *B* is raised several feet above the top of the lining, permitting a free circulation of air. The eaves *C* project sufficiently to keep out rain and snow. To fill the bin the scaffold *D* and chute *E*, shown in plan in Fig. 2, are raised or lowered to the required height by means of the rope and pulleys suspended from the roof, the scaffold serving as a working floor, and the chute as a means of guiding the grain to the center of the bin. The planks forming the lining at the chute are removable in sections so that the material can be filled into the bin at any desired height, thus avoiding unnecessary hoisting. To discharge the contents the spout *F* is provided, attached beneath the opening shown at 11 in Fig. 2. This opening can be made at various heights, sections of planking being made removable, as at the intake opening, in the manner shown at Fig. 5, in which 2 and 2 represent hoops of T-iron and 10 a section of plank.

A grain bin of this style of construction might meet with a strong demand among the farmers of the Northwest who have always been desirous of storing their own grain.

HAY AT CHICAGO.

M. M. Freeman & Co. report that the conditions of the hay and straw market are unusual and extraordinary, arrivals, with rare exceptions, being heated and spoiled on reaching destination. It is certainly a great calamity, for every one in any way connected with the handling, shipping, making or selling of these products meet heavy and grievous losses through causes that are beyond their control. Of course the hay and straw, pressed in good condition last fall and properly protected, will, in all probability, come out all right, but the stacked hay which has been pressed during the winter months and spring, will surely heat if it contains moisture, of which all stacked hay contains more or less. We discourage shipments entirely except of barn hay or straw, which is sound and dry at present.

Receipts for the week ending April 12, 803 tons, shipments 99 tons.

TIMOTHY.—With few exceptions it is arriving heated, but choice No. 1, sound and dry, is in active demand. No. 1, \$11@12. No. 2, \$9@10. Mixed, \$7½@9.

PRAIRIE.—A dry car of Iowa upland is a rarity and meets ready sale. Hot and caked hay is unsalable. Choice sound dry Iowa upland, \$9@10. Good sound dry Iowa upland, \$7@8. Good feeding hay, \$5@6.

STRAW.—Dry straw is in fair demand. Wet or damaged is unsalable. Rye, \$8¼@8¾. Oat and wheat, \$5½@6¼.

It is true receipts are becoming materially lighter than they have been, yet are larger than conditions warrant. We are certain that the best thing that could happen would be to have very little or no hay come in for some days, as the accumulation of hot and damaged hay on tracks is still very large.

CROP : CONDITIONS.

IOWA, DECATUR, DECATUR Co., April 3.—Wheat and rye are in good condition. The acreage of wheat, rye and oats is small. J. C. NEGLEY.

INDIANA, SUNMAN, RIPLEY Co., April 10.—As to wheat the condition is good, the acreage large and the stocks on hand large. F. PETERS, JR.

ILLINOIS, NORRIS CITY, WHITE Co., April 10.—Wheat is in fair condition, with an average acreage. Of wheat and corn average stocks are on hand. H. WAKEFORD.

NEBRASKA, HASTINGS, ADAMS Co., April 10.—Wheat is good and the acreage large. On hand we have average stocks of wheat and corn and small stocks of oats, rye and barley.

ILLINOIS, NEW BERLIN, SANGAMON Co., April 11.—Wheat is poor and oats good. The oats acreage is large. An average stock of corn and small stocks of wheat and oats are on hand.

TEXAS, SHERMAN, GRAYSON Co., April 11.—Wheat, corn and oats are in good condition. The acreage of wheat is average, that of corn and oats large. Average stocks of corn and small stocks of oats are on hand.

OHIO, DUNBRIDGE, WOOD Co., April 10.—Wheat and rye are in good condition. Corn is not in and oats are not up. A large acreage is in wheat. Small stocks of wheat, corn, oats, rye and barley are on hand. E. W. DEVERNA.

TENNESSEE, WOODLAND MILLS, OBION Co., April 10.—Wheat is in fair and corn in average condition. An average acreage is planted with both. Small stocks are on hand. We have no oats, rye or barley. DAVIS & BRAMHAM.

MICHIGAN, LACOTA, VAN BUREN Co., April 10.—Wheat and rye are in average condition. Wheat has been sown on an average acreage. The stocks of wheat are average, and those of corn, oats and rye small. V. H. DELLEY.

IOWA, HILLSDALE, MILLS Co., April 11.—Wheat, oats and rye are good in respect to condition, and small in respect to acreage. The stocks are small, except corn, of which an average stock is on hand. No barley has been planted. W. M. COATS.

TEXAS, WILLS POINT, VAN ZANDT Co., April 10.—Corn and oats are in average condition. The acreage of corn is average, and the acreage of oats large. The stocks on hand are small. Very little wheat, rye or barley is raised here. WINGS BROS.

OHIO, FAYETTEVILLE, BROWN Co., April 10.—The condition of the growing wheat is fair, of oats good, and of rye average. The acreage of wheat and oats is average. The stocks of wheat are average, and those of corn and oats small. CUSHING & McEOWN.

INDIANA, SELMA, DELAWARE Co., April 10.—Wheat and oats are in good condition, and rye is poor. An average acreage of wheat and small acreages of oats and rye have been sown. An average stock of wheat and small stocks of corn, oats and rye are on hand.

KANSAS, CLAY CENTER, CLAY Co., April 9.—Wheat is poor, and corn, oats and rye are fair. The acreage is, of wheat, large; of corn and oats average, and of rye small. A large stock of wheat and small stocks of corn, oats and rye are on hand. No barley is grown here.

MISSOURI, DREXEL, CASS Co., April 10.—Our growing wheat is in good condition, as is also oats. An average acreage of corn, a large acreage of wheat, and a fairly large acreage of oats have been planted. Stocks of wheat and oats are small, of corn average. M. REED & SON.

MISSOURI, ARMSTRONG, HOWARD Co., April 7.—Wheat is in poor condition. Corn, oats and rye are in good condition. The acreage of wheat and corn is large, and that of corn small. Small stocks of wheat, oats and rye are on hand. An average stock of corn is on hand. R. P. BRIGGS.

KENTUCKY CROP REPORT.—Agriculture Commissioner McDowell in the crop report says the winter has been unusually severe on both grain and stock. Reports as to wheat are varied. It has had much to contend with from the time it was planted. Seeding was done with great difficulty. In many places the wheat was sown in dust, and in some instances did not germinate for thirty days. The condition of wheat is placed at 90 per cent. The

rye and barley crops are growing smaller every year; the condition of both is 90 per cent. The hemp crop is fine and its condition is 90 per cent. A general shortage in the hog crop is noted.

IOWA, GARWIN, TAMA Co., April 10.—A large acreage is sown to barley, an average to wheat, corn and oats, and a small acreage to rye. On hand there is an average stock of wheat, a large stock of corn, and small stocks of oats, rye and barley are on hand. C. CHRIS TENSION.

NEBRASKA, FULLERTON, NANCE Co., April 11.—The condition of wheat is average, of rye good. The acreage of wheat is large, of oats and rye average. Of barley there is none. The stocks on hand are small. No corn has been planted yet. The weather is hot and dry. JOHN PATON.

NEBRASKA, FRANKLIN, FRANKLIN Co., April 8.—Wheat is fair in condition and average in acreage. Of wheat and corn the stocks are large, of oats average, and of rye and barley small. The ground is very dry, no snow or rain to speak of having fallen for six months. W. H. AUSTIN.

KENTUCKY, LEXINGTON, FAYETTE Co., April 10.—Wheat and barley are in good condition, and rye is in average condition. The acreage of wheat is large, of oats average, and of rye and barley small. Average stocks of wheat and corn, and small stocks of oats, rye and barley are on hand. BRENT.

KANSAS, SMITH CENTRE, SMITH Co., April 10.—Oats and rye are in fair condition, wheat is poor. Oats, rye and wheat have been sown on a large acreage, while the acreage of corn is an average, and that of barley small. Small stocks of corn, rye and barley, and average stocks of wheat and oats are on hand. D. W. RELIHAN.

INDIANA, SANDFORD, VIGO Co., April 10.—While it is too early in the season for a satisfactory report, we would say that wheat is in poor condition. The acreage of corn is large; of oats average, and of wheat, rye and barley small. The stocks of these grains are small, except wheat, of which an average quantity is on hand. SHICKEL & JOHNSON.

KENTUCKY, HOPKINSVILLE, CHRISTIAN Co., April 10.—The weather is fine for the growing crops, especially for corn planting and the wheat. Some fields were too thin on the ground. Wheat is in fair condition, corn good and oats fair. An average acreage is devoted to wheat, corn and oats, a small acreage to rye, and none to barley. The stock of wheat on hand is large, of corn average, and of oats and rye, small. COWAN & Co.

MISSOURI, ARROW ROCK, SALINE Co., April 10.—The condition of wheat, corn and oats is good. We have no rye or barley. The acreage of wheat and oats is an average one, and that of corn large. The stocks on hand of wheat and corn are small. No oats is on hand. We have had plenty of rain in the last few days. This locality will have a full average crop of wheat if the weather is seasonable from this time on. Corn planting has just commenced. The ground is in splendid condition. C. M. SUTHERLIN.

RYE IN ILLINOIS.—The state report says: Winter rye has not suffered so much from the severe weather of the past winter as wheat, and the April 1st reports show but little over 11 per cent. of area sown as winter killed. Of the 129,116 acres seeded in the northern division last fall, 8 per cent. is reported winter killed, leaving 118,982 acres for harvest. In Central Illinois 22 per cent. was destroyed, leaving 10,252 acres, while in the southern division of the state, where but 3,685 acres were seeded, 4 per cent. was winter killed, leaving 3,544 acres for harvest. The April 1st condition of this crop is also more promising than that of wheat, being 82 per cent. of an average in Northern Illinois, 77 per cent. in the central, and 84 per cent. in the southern division.

OHIO CROPS.—The official report of the state board of agriculture shows the average condition of crops April 1. Indications point to a yield in wheat of 85 per cent. of a full average crop; barley, 85 per cent.; rye, 90 per cent.; corn, 90 per cent. The estimated old wheat of last year in hands of producers is 10,000,000 bushels. The condition as given is by comparison with a full average condition, as follows: Wheat—Area compared with last year, 95 per cent.; estimated area for the harvest of 1893, 2,690,956 acres; condition of plant, 85 per cent.; crop of 1892 still in producers' hands, 25 per cent. Barley—Area compared with last year, 93 per cent.; estimated area for

the harvest of 1893, 15,790 acres; condition of plant, 58 per cent. Rye—Area compared with last year, 90 per cent.; estimated area for the harvest 1893, 48,530 acres; condition of plant, 90 per cent. Corn—Condition in crib, 90 per cent.; crop cut up last fall for fodder, 87 per cent.; remained unhusked during the winter, 8 per cent.; damage to corn unhusked during the winter, 10 per cent.; damage to fodder during the winter, 13 per cent.

CROPS IN IOWA.—The first Iowa crop bulletin of the season, issued April 11, says: After a winter of unusual severity the crop season of 1893 opens under favorable conditions. In nearly all portions of the state the snow afforded ample protection to the soil against the extreme cold, and the frost was well out of the ground by the first of the month. Farming operations were begun a week earlier than in the average of recent years, and the greater portion of the seeding is already completed, with an increased acreage of small grain, except spring wheat. Increased area of winter wheat was planted last fall, though the acreage is, as yet, relatively light. The autumn drouth checked its germination to some extent, and the plant was not in favorable condition to withstand the winter. Its percentage of condition is therefore quite low, especially in some of the southern counties, where the snowfall was light. In some localities it is healthy, in others very poor. Rapid progress is being made in the preparation of corn ground, and if the favorable weather continues planting will begin about the middle of the month.

MICHIGAN CROP REPORT.—The Michigan crop report for April says that the present outlook for wheat in Michigan is not promising. There had been no spring growth in April when the reports were made, hence no estimate of the percentage killed could be made. The fields were brown and did not look as well as immediately after the snow went off. Correspondents, almost without exception, report the crop in bad condition. The decline in appearance is due to high, drying winds and lack of rain. The average condition in the southern counties is 81 per cent.; in the central 91 per cent., and in the northern counties 93 per cent., comparison being with average years. In the southern counties the condition is 9 per cent. lower than one year ago, and 16 per cent. lower than in 1891. Wheat made small growth in the fall and was in poor condition at the opening of winter. The average condition in the southern counties November 1 was 83 per cent. The low percentage was caused by dry weather and insects. Nearly 80 per cent. of the correspondents in this section reported injury by insects. The total number of bushels of wheat reported marketed by farmers in March is 999,347, and the total number of bushels reported marketed in the eight months from August to March inclusive is 11,530,270, which is 772,545 less than was reported marketed in the same months one year previous. Clover meadows and pastures are thought to be in better condition than one year ago. The figures for the southern counties are 92 per cent.; the central 97 per cent., and the northern counties 96 per cent., comparison being with average years.

GOVERNMENT CROP REPORT.—The April report of the statistician of the Department of Agriculture makes the average condition of winter wheat April 1, 77.4, against 81.2 last year, and that of rye 85.7. The averages of the principal wheat states are: Ohio, 87; Michigan, 74; Indiana, 82; Illinois, 72; Missouri, 76, and Kansas, 62. The average of these six states is 74.2, against 77 in April, 1892. It is 88 in New York, 87 in Pennsylvania, 89 in Maryland, 87 in Virginia, the southern states ranging from 84 in Tennessee to 100 in Texas. The Pacific states show a favorable condition, with the exception of California, where much rain is reported. Seeding was late in the Ohio and Mississippi Valleys because of widely prevalent drouth, causing a poor condition of soil and retarding germination, and in some cases wholly preventing the same. In Kansas the reports show a total failure over considerable areas. In the Atlantic, Middle, Southern and Pacific states seeding conditions were favorable. The plant entered winter in the main wheat producing states in a low state of vitality, caused by persistent drouths and early cold weather, with the exception of California, where excessive rains produced a similar effect. Damage from the Hessian fly is noted in parts of the states of Ohio, Michigan, Indiana and Illinois. Snow covering has been general throughout the Eastern, Middle and Northwestern states, but notwithstanding, the reports show much abatement from the benefits of the protection thus afforded because of the

excessive cold of the winter and high winds, the alternate thawing and freezing in the latter end of the month of February and through March.

KANSAS STATE REPORT.—The reports received at Secretary Mohler's office from correspondents of the board, indicate the following agricultural condition of Kansas, March 31: Wheat—The state as a whole ever since seeding time last fall, has had unfavorable condition for the development of the wheat plant. There has been some exceptions to this in some sections of state, especially in eastern and southern counties. The abundant rainfall of a year ago, which extended into midsummer, was only followed in the fall by dry weather, and correspondents with some exceptions, mostly in eastern and southern counties, report that the soil last fall was in poor condition for germination and growth of wheat. The condition was continued, especially in central and western belt of the state during the winter and up to the date of this report, and the result is that the wheat plant, in a general way, is not in a promising condition at this time.

CROPS IN ILLINOIS.—The Illinois State Board of Agriculture has condensed the following facts as to the area and condition of winter wheat from returns to that office by correspondents April 1: The dry weather at seeding time last fall resulted in a decrease in the area seeded, as compared with the crop harvested in 1892, of a little over 25 per cent., the total area so seeded being but 1,568,285 acres. In the northern division of the state 22 per cent. of the area is reported winter killed; in the central division 32 per cent., and Southern Illinois 13 per cent., or an average for the state of 22 per cent. As will be seen, the damage done is much greater in Central Illinois than in either of the other two grand divisions. With one or two exceptions, all the counties reporting an unusually large injury are in that section. So far as the correspondents specified the manner of the injury, it was done entirely by winter killing. Not one mentioned the presence of the Hessian fly, and a number stated that it was not in any wheat they had examined. From these figures it is learned that the area for harvest in the northern division will be about 81,399 acres; in the central division 480,629 acres, and in the southern division 661,768 acres. Wheat has scarcely commenced to grow in some localities, so it is difficult to form a correct estimate of its condition, but its present appearance indicates about 73 per cent. of an average condition at this season. The April 1 condition in the northern division is 77 per cent. of a seasonable average; 63 per cent. in central, and 80 per cent. in Southern Illinois.

SAVED AN ELEVATOR.

C. F. Burkhart, the principal witness for the prosecution in the trial for the murder of John M. Clayton of Arkansas, is thought to be no other than Charles Newton Landers, who in the summer of 1880 got a position as operator for the Union Pacific Railroad at Armstrong, just across the line from Kansas City, Mo. There was a large grain elevator adjoining the Union Pacific tracks at the state line on the railroad's leased ground which they had been trying to have removed for a long time so as to make extensive improvements there. The elevator owners were obstinate, however, and held out for a big price. And so things stood until one day the situation was so acute that it was evident a crisis was approaching. A gigantic coup was suddenly planned. Sylvester Smith was the railroad's superintendent—quite a daring official and doubtless backed by Jay Gould in whatever he proposed to do. A special train was arranged to run over from the Armstrong shops late that night with the entire crew of employees, all of whom were told to be promptly on hand at 11 A. M. for "special work," where no questions were to be asked. The utmost secrecy was exacted all around. At the appointed time the "destruction train," with a small army of employees on board with all the necessary tools for razing the elevator to the ground, slowly moved eastward out of the yards, but great was the surprise on reaching the state line to meet Mayor Chace there ready to greet them with a hastily summoned posse of citizens. Chief Speers was also on hand with a big body of Metropolitan police. The mayor mounted a switch engine and commanded them in the name of the City of Kansas to desist and return whence they came, and they "pulled their freight" very slowly and reluctantly, so disgusted were they with the ridiculous outcome of the brilliant scheme. The elevator was guarded by special watchmen that night and didn't come

down then, but it did a year or two later when the owners got a good price.

The Union Pacific never knew definitely who revealed their plans, but slightly suspected Landers, as he quit a few days later. Landers got an intimation of it late that afternoon by hearing it clicked on the wires at his station. When he got off duty, about 7 P. M., he hired a buggy and drove rapidly to Mayor Chace's office, at the old city hall, and not finding him there, quickly drove to his house on Twelfth street, West Kansas, and gave him the tip. The mayor at once went to police headquarters and prepared for action. Landers then hunted up the elevator owners and they were quickly on the scene with many friends to protect their property. The next day Landers struck them successfully for \$250 for his valuable pointer. It was worth perhaps \$25,000 to them.

KANSAS CITY HAY EXCHANGE AND HAY TRADE.

Early this year a hay exchange for the storage of hay was completed at Kansas City, Mo., and recently the railroad companies have made an effort to stop the delay of cars at team tracks by trying to induce receivers to unload through the exchange. This has been opposed by some, but the majority seem to favor the handling of all hay through the exchange. Following is a statement issued by the president of the exchange:

"The hay business of this city has heretofore been transacted under very serious difficulties. There has been no public warehouse where shippers or receivers could store their hay, and both shippers and receivers had to use what is known as team tracks. Neither the shipper nor the buyer under this arrangement had any assurance as to weights; the buyer had to accept the weights of the seller and the shipper must accept the weights of the receiver without any assurance as to their accuracy except the good faith and honesty of the parties weighing. Frequently there were stealings from the cars; these either the shipper or receiver must lose—generally the loss falling upon the shipper. These difficulties created a demand for a public warehouse where hay can be safely stored and correctly weighed out. At the solicitation of a large number of hay dealers of Kansas City, the Kansas City Hay Exchange was established, being assured by four-fifths of the leading hay dealers of the city that there was an urgent demand and great necessity for a hay exchange and warehouse here, and such dealers promising that in case the Kansas City Hay Exchange would proceed to construct a large warehouse for the storage of hay and establish a hay exchange, that all hay received by them should pass through and be handled by the same, they agreeing to pay storage as stipulated in a contract or obligation signed by them. Thereupon the Kansas City Hay Exchange leased ground at Eighteenth and Liberty streets and constructed a warehouse with a capacity of 200 cars of hay. This company is organized upon a substantial basis with sufficient capital to conduct and carry on its present business successfully. The warehouse was formally opened for business Jan. 11, 1893, with reasonable rates of storage. Its facilities for storing hay are excellent and ample to meet all demands, and it insures to shipper, purchasers and receivers correct weights and good grades of hay, and gives to both shippers and receivers a commodious warehouse where their hay is well and safely kept. Its warehouse is easy of access from all points in the city. A warehouse must necessarily be located upon railroad tracks where hay can be delivered to it by all companies coming into the city with ease; hence the necessity for locating this warehouse in the West Bottoms. The schedule of rates adopted by this company and now in force are reasonable and are much lower than the rates used by similar institutions in other cities. This schedule of rates was established upon the belief and promise that the company would receive most liberal support by all the hay dealers. Its warehouse is regular and it issues receipts for all hay left with it for storage, which receipts are negotiable and will be taken by all banks for advancements.

"The Hay Exchange purposely made its rates of storage very low that it might secure the patronage of all the hay dealers. This low rate of storage is entirely dependent upon its patronage, and if not sufficiently patronized and encouraged by hay dealers to place it upon a paying basis it will of necessity be compelled to increase its storage rates. It will furnish a place where both the buyer and seller can meet and trans-

act their business of buying and selling hay. It will be a place for the general delivery of all hay shipped to the city, and will result in the establishment of fixed rules for the transaction of the hay business, and will encourage and build up a good healthy hay market in the city and greatly facilitate the reconsignment of hay from this point and the transaction of hay business generally. Its plan of doing business is not new, but is modeled after similar institutions in other cities."

RICE AS FOOD FOR LIVE STOCK.

The low prices which have prevailed for rice this season, and the accumulation of poor grades, for which only unsatisfactory prices could be realized, appear to have encouraged owners of live stock to experiment with rice as food for their animals. It is now common talk at the New Orleans Board of Trade that those who made these experiments have been more than satisfied with the results, having found that the low grade rice has not only been much cheaper than the ordinary feed, but has kept the stock in splendid condition.

There is always a large amount of low grade rice in every crop, which, because of the presence of black seeds, red grains or foreign substances, becomes difficult to sell to millers. This rice is necessary to dispose of at a sacrifice in order to move it at all. This season, owing to the immense crop, large quantities of this rice have accumulated from time to time and sold at prices ranging from \$1.25 to \$1.50 per barrel of 163 pounds. Such rice, it is claimed, makes excellent feed for live stock, and at the prices named is much cheaper than an equal weight of oats. Fair quantities have been sold for that purpose this season, and the leading rice receivers appear to believe that were the merits of this class of rice as feed for stock generally known they would experience no difficulty in finding a market for it.

This matter is certainly worth more attention than has yet been given it, because if, on investigation, it is shown that low grade rice, which is hard to move in the ordinary channels, can be profitably used as feed for stock, the problem for finding a ready market for such rice would be permanently solved.

THE EXPORT GRAIN TRADE.

The advance sheets of the report of the chief of the bureau of statistics of the exports of breadstuffs for the nine months which ended March 31 shows how very much the balance of trade is against the United States. For the month which ended March 31 the exports of breadstuffs were only \$40 407,188, as against \$77,170,719 in the month of March, 1892.

The contrast between the aggregate for the nine months which ended March 31, 1893 and 1892, respectively, is in proportion. The total exports for the nine months which ended March 31, 1893, were only \$145,032,766, as against \$233,159,912 for the same period of last year.

The exports of corn fell off for the nine months ending March 31 from \$31,623,934 in 1892 to \$13,645,588 in 1893. The exports of wheat for the nine months period ending March 31, 1892, in value amounted to \$130,278,968, while for the nine months period which has just ended the exports of wheat fell to \$71,989,499.

Wheat flour is the only export in which there was an increase in the nine months which have just ended over the corresponding period of the year 1892. The exports for that period in 1892 aggregated \$55,891,770. They have increased in the nine months just ended to \$56,533,126. This increase is due undoubtedly to the reciprocity features of the treaty with Spain in consequence of which we have sent that much more in value of flour to Cuba.

"Union Elevator," Chattanooga, Tenn.: "We do not believe we can do without the AMERICAN ELEVATOR AND GRAIN TRADE."

A mammoth golden ear of corn as a figure head is suggested as a fitting gift of the state of Iowa to the new warship named Iowa.

C. L. Oliver, Omaha, Neb.: "I consider the AMERICAN ELEVATOR AND GRAIN TRADE and the *American Miller* very valuable to those interested in the grain trade."

Maguire & Co., Cincinnati, O.: "We regard the AMERICAN ELEVATOR AND GRAIN TRADE the most valuable trade paper published at the present time, and take pleasure in renewing our subscription."

Trade Notes.

A man may stop his drinking,
Stop his smoking and his chews,
Stop his brooding and his thinking
About all his debts and dues.
He may stop his plan of credit,
And insist on having cash,
If one way he's not misled, it
Will not finish in a crash.
If to stop his regulation
Advertising he is led,
Then he stops his "circulation,"
And he might as well be dead!

The Kanneberg Roofing Company of Canton, O., has enlarged its works to double the former size and added many improvements.

The Prinz & Rau Manufacturing Company of Milwaukee, Wis., has recently shipped grain cleaning machinery to New Zealand and to Moscow, Russia.

James Everington, superintendent of the "Pillsbury Elevator" at Minneapolis, Minn., has designed a grain separator. One will be placed in the "Pillsbury A Mill."

The Nordyke & Marmon Company of Indianapolis, Ind., manufacturing elevator and mill machinery and supplies, are very busy. At no time in the history of the works has business been so large as at present.

The Johnson & Field Company of Racine, Wis., manufacturers and dealers in oat clippers and elevator supplies, have issued a new catalogue of their grain cleaners, separators, steam engines, gas engines, horse powers and general elevator supplies. Copies will be sent upon application.

The G. W. Crane Company has been incorporated at Minneapolis with \$100,000 capital stock to carry on the business in elevator and mill supplies, engines, boilers, etc., hitherto conducted by Mr. G. W. Crane. The incorporators are D. M. Gilmore, president; G. W. Crane, manager; J. Frank Atwood and Ernest Fagersrom.

The Chicago Steel and Iron Roofing Company has been succeeded by the Columbia Corrugating Manufacturing Company. A second factory has been built and is now being operated at East St. Louis, Ill., the company having offices at Chicago and St. Louis, Mo. Since the start two years ago the business of the company has so far developed quite satisfactorily, and it is now more efficiently equipped than ever to supply the trade. The 1893 catalogue issued by the company gives all required information as to the ordering, laying and cost of roofing, etc., so no one can go astray. A specialty is made of elevator plates for roofing and siding.

GALVESTON'S ADVANTAGES FOR HANDLING EXPORT GRAIN.

Only last November, 24th day, the Gulf, Colorado and Santa Fe put in a rate of 32 cents per 100 on wheat, rye and barley, 30 cents on oats, and 27 cents on corn and hay, from all points in Kansas to Galveston. Under this rate Galveston grain buyers went on the market, and up to and including January 20 had purchased 2,467 cars of wheat. During this period, however, snows and rains fell in Kansas, putting the country roads in such bad shape that no grain could be hauled to market by the farmers for some fifteen or eighteen days. Then came the wheat like an avalanche, and the Santa Fe was plugged with 1,000 cars of that cereal bound for Galveston. On February 7 about 600 cars were moving down the Santa Fe, all wheat laden and bound for Galveston.

Since November 24 up to date, March 17, 3,625 cars of wheat, of 1,811,435 bushels, and 242 cars of corn, of 122,190 bushels, have been shipped to Galveston. Of this 449,614 bushels of wheat have been for consumption in Galveston, through being ground in the local mills. Of this amount of grain 742,000 bushels of wheat and 35,802 bushels of corn have been exported. The freight on this grain has amounted to about \$333,306. Immediately after the announcement of the Santa Fe's grain rate other trunk lines to Galveston made the same rate. At the outset the banks of Galveston agreed to furnish, for the development of legitimate grain business, any amount of money needed. The banking capital of this city, by the way, approximates \$12,000,000.

Right here it is well to consider the physical situation of Galveston as compared with other grain export points.

That Galveston is near to the grain accumulating centers of Kansas and Nebraska is seen from the following table. The mileage is that of the shortest all rail routes:

	Galveston.	New Orleans.	New York.	Baltimore.
Omaha.....	994	1,185	1,483	1,412
Kansas City.....	799	990	1,438	1,217
Hutchinson.....	753	1,235	1,683	1,472

To illustrate the territory adjacent to Galveston as against New York, connect these cities with a straight line. Bisect this line and draw a line at right angles thereto, extending it to the Atlantic coast and to the Canadian border. This line passes out near Cumberland Island, Ga., on the Atlantic end, and passes about forty miles west of Minneapolis at the Canadian end. All points on this line are equally distant from Galveston and New York City. All points west of that line are nearer to Galveston than to New York City. This territory being nearer to Galveston than to New York should cut a figure in the development of this port, both as an exporting and an importing point.

About 60 per cent. of the entire area, 48 per cent. of the population and 70 per cent. of the railway mileage are nearer to Galveston than to New York City.

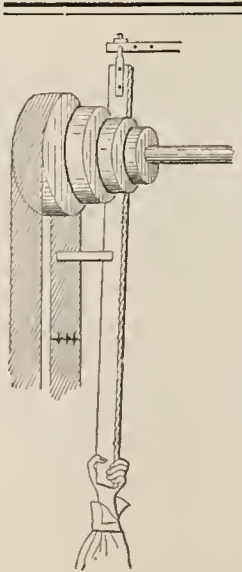
Some of the reasons why Galveston should be the chief seaport of the Southern United States are these: Galveston is right on the gulf. The pilotage dues are only \$4 per foot draft. It is a safe port all the year. There are no quarantine dues. There are no levee dues. The wharfage is merely nominal. The entire terminal charges on grain, which include switching, elevating, weighing, fifteen days' storage and loading out are 1 cent a bushel.

Now consider New Orleans, and then the comparison between the two ports certainly is favorable to Galveston. New Orleans is 110 miles up the river. There are both bar pilotage and river pilotage fees to pay, which amount, combined, to about double Galveston's pilotage. There are quarantine fees to pay. There are harbor master's fees to pay. The levee due is 20 cents per ton.

Contrast with all of these Galveston's port charges: Pilotage and small wharfage, no harbor master's fee, no quarantine fee, no levee fee. This amounts to about \$400 in favor of Galveston on a 1,500 ton ship.—*Galveston News.*

NEW SCHEME FOR FARMERS' ELEVATOR.

It is no doubt true that many farmers are carried away with the idea of a big elevator, that is to enable them to ship wheat to Europe or to any part of this country without mixing, etc. They have been told there is a profit of above 30 cents a bushel in exporting and the way it has been proved to them has been to call the price in Europe 10s a quarter higher than it really is. That is equal to 30 cents a bushel and many farmers believe it. Here is the impracticable idea of one of them: "I am in favor of the building by the state of a warehouse with sufficient capacity to provide storage for all who may wish it. It should be so constructed that a farmer can store his grain in a separate apartment. This will prevent any mixing. I want the farmer to be able to reach the markets of the world with his own wheat. I would make it possible for the farmer to store as little as one car of grain, or a sack."



A SIMPLE BELT SHIFTER.

Queries and Replies.

Questions and answers are inserted under this head free of charge and all are invited to avail themselves of this column.

No. 14. Sample Box Manufacturers.—Will some reader of the AMERICAN ELEVATOR AND GRAIN TRADE please give me the address of a manufacturer of sample boxes for grain?—F. M., care AMERICAN ELEVATOR AND GRAIN TRADE, Chicago, Ill.

No. 15. Who Owns Boards Put up at Car Doors?—Can some reader of the AMERICAN ELEVATOR AND GRAIN TRADE tell us to whom the boards put up at the car doors to hold the grain in, belong to—the railroad or the consignee? Are they furnished by the railroad in the West or by the shipper? There is nothing loaded back in bulk here, so that the boards are taken by the railroad employees for their own use.—STEWART BROS., Skowhegan, Maine.

FLAXSEED PRODUCTION.

The flaxseed crop has been practically abandoned as a farm crop east of the Mississippi River, and its product concentrated in five states west of the river, says the *New York Homestead*. It is grown practically for seed, and so long as the straw and fiber cannot be used the crop cannot become a very important one. In 1891, owing to high prices, the largest crop ever grown was harvested, but the acreage and yield were both materially reduced in 1892. The crops of the two past years compare as follows:

	1891.		1892.	
	Acres.	Bushels.	Acres.	Bushels.
Ohio.....	18,498	133,912	9,804	64,706
Indiana.....	3,011	26,349	753	5,271
Illinois.....	3,425	25,013	1,755	14,200
Wisconsin.....	6,451	68,909	4,838	45,961
Minnesota.....	425,089	4,082,981	403,835	3,432,598
Iowa.....	280,704	2,898,596	266,669	2,133,352
Missouri.....	66,577	459,848	35,286	215,245
Kansas.....	360,000	2,610,000	185,000	1,184,000
Nebraska.....	240,000	1,075,000	168,000	1,260,000
North Dakota....	115,000	580,000	35,000	315,000
South Dakota....	390,446	2,431,504	351,000	2,284,107
Other.....	17,679	163,160	15,000	150,000
Totals.....	1,927,293	15,455,272	1,477,361	11,104,440

RUST PREVENTION.

An experiment in rust prevention by M. Leon Nolrot, a farmer of Vauxhaub, in the Department of the Cote d'Or, France, has been attracting some attention in that country, says the *Miller of London*. The subject of the experiment was a half-acre field of clayey soil, which was sown with white wheat of the country on Nov. 8, 1891; on May 28, 1892, one-half of the field was treated with 4½ pounds of sulphate of copper and 6¾ pounds of sulphate of soda, dissolved in two gallons of water and applied with a sprayer. The remaining half of the ground was left untouched. It is stated that whereas the dressed section yielded at the rate of 36 bushels to the acre, the undressed land only gave 22 bushels. The straw of the dressed wheat was perfectly white, while the other was rusted and black. The weight of the dressed wheat was, moreover, 10 per cent. above the undressed.

EXPORTS FROM ATLANTIC PORTS.

The exports of breadstuffs, as compiled by George F. Stone, secretary of the Chicago Board of Trade, from Atlantic ports during the two weeks ending April 8, as compared with same weeks last year, have been as follows:

	For week ending April 8. April 9.		For week ending April 1. April 2.	
	1893.	1892.	1893.	1892.
Wheat, bu	1,120,000	1,124,000	1,703,000	1,799,900
Corn.....	673,000	2,310,000	648,000	2,369,500
Oats.....	57,000	140,000	84,000	152,000
Rye.....	14,000	114,000	9,000	150,000
Flour, bbls.....	331,000	287,000	296,000	255,600

VISIBLE SUPPLY OF GRAIN.

The following table shows the visible supply of grain Saturday, April 8, 1893, as compiled by George F. Stone, secretary of the Chicago Board of Trade:

In Store at	Wheat, bn.	Corn, bn.	Oats, bn.	Rye, bn.	Barley, bu.
Albany	28,000	60,000	10,000	2,000	
Baltimore	628,000	366,000	81,000	81,000	
Boston	24 0 0	80,0 0	9,000	12,000	
Buffalo	1,850,0 0	251,0 0	44,000	31,000	188,000
do afloat	358,000				
Chicago	16,764,000	5,281,000	1,942,000	432,000	51,000
do afloat	4,916,000	3,333,000	472,000		
Cincinnati	14,000	8,000	18,000		44,000
Detroit	1,900,000	46,000	10,000	2,000	105,000
do afloat	374,000				
Duluth	16,796,000	341,000		17,000	5,000
do afloat	571,000				
Indianapolis	148,000	145,000	20,000	2,000	
Kansas City	1,269,000	262,000	24,000	8,000	
Milwaukee	2,016,000	13,000	25,000	133,000	122,000
do afloat	82,000				
Minneapolis	11,384,000	121,000	30,000	1,000	12,000
Montreal	587,000	14,000	574,000	41,000	85,000
New York	7,594,000	311,000	687,000	5,000	25,000
do afloat	138,000	25,000		23,000	38,000
Oswego					55,000
Peoria	148,000	112,000	168,000	17,000	17,000
Philadelphia	898,000	116,000	118,000		
St. Louis	4,624,000	1,588,000	78,000	11,000	22,000
do afloat		190,000			
Toledo	3,742,000	2,164,000	105,000	33,000	
Toronto	272,000		51,000		52,000
On Canals	58,000				
On Lakes					
On Miss. River	166,000	122,000	7,000		
Grand total	77,273,000	14,914,000	4,423,000	868,000	836,000
Same date last year	41,177,000	10,955,000	3,221,000	1,495,000	799,000

INSPECTED RECEIPTS AT CHICAGO.

According to the report of Chief Grain Inspector George P. Bunker the grain received at Chicago during the month of March was graded as follows:

WINTER WHEAT.

Railroad.	White.			Hard.			Red.				No Grade.
	2	3	4	1	2	3	1	2	3	4	
C. B. & Q.	3	1		32	27		28	37	13		
C. R. I. & P.	1	1		3	11		5	10	11		
C. & A.	1				3			19	4		2
Illinois Central ..	2			3	7		16	41	18		
Freeport Div.				15			2	1	2		
Galena Div. N. W. ..				2	3		16		1		
Wis. Div. N. W.	3	3					19	22	1		
Wabash							5	24	1	10	
C. & E. I.							3	14	4		
C. M. & St. P.	5	2		1			15	23	2		
Wisconsin Cent.											
C. G. Western	1			81	267		21	10	1		
A. T. & S. Fe.				33	176		146	319	16	18	
Through & Spec.	1			6	43		130	53	20	5	
Total each grade ..	1	16	7	176	537		406	573	94	35	
Total W. wheat.											1845

SPRING WHEAT.

Railroad.	Northern.	2			No Grade.	White.			Mixed Wheat.
		2	3	4		2	3	2	
C. B. & Q.		254	449	95	5	4	65		6
C. R. I. & P.		16	26	5			16		
C. & A.									
Illinois Central ..			1						
Freeport Div.		15	18	1					
Galena Div. N. W. ..		105	199	33		1	5		1
Wis. Div. N. W.		115	102	9					1
Wabash			3	1					
C. & E. I.									
C. M. & St. P.		332	530	32		2	5		2
Wisconsin Cent.		9	13						
C. G. Western		27	92	11			1		
A. T. & S. Fe.		6	7	2					1
Through & Spec.		953	297	63			116	4	
Total each grade ..		1832	1737	254		5	7	209	10
Total Spg. wheat.									4058

CORN.

Railroad.	Yellow.		White.		2	3	4	No Grade.
	2	3	2	3				
C. B. & Q.	56	112	5	24	20	297	37	1
C. R. I. & P.	13	20	2	4	79	87	18	
C. & A.	14	79	2	35	12	65	22	
Illinois Cent.	39	313	20	82	27	148	155	17
Freeport Div.	1	6			1	6	6	
Gal. Div. N. W.	17	42	1	4	36	52	13	1
Wis. Div. N. W.						1		
Wabash	19	64	1	25	14	40	53	6
C. & E. I.	8	110	3	10	1	85	84	2
C. M. & St. P.	2	27		2	4	24	5	1
Wis. Central.								
C. G. Western	18	54			51	182	16	4
A. T. & S. Fe.	58	86	23	27	141	113	19	
Th'gh & Spel.	20	339	3	16	29	135	37	5
Total each grd ..	265	1252	60	230	595	1235	465	37
Total corn								4129

OATS.

Railroad.	White.			2	3	White Clipped.		No Grade.
	1	2	3			1	2	
C. B. & Q.	1	200	348	54	43			2
C. R. I. & P.		12	262	9	101			7
C. & A.		19	36	31	16			
Illinois Central ..		9	82	52	11		1	
Freeport Div.		4	157	15	62			1
Galena Div. N. W. ..		26	407	16	53		1	1
Wis. Div. N. W.		4	108	1	29		1	1
Wabash			19	7	2			
C. & E. I.		11	23	13	15			
C. M. & St. P.		7	358	18	175			12
Wisconsin Central ..		1	2	1	2			
C. G. Western		17	170	10	74			1
A. T. & S. Fe.		28	72	88	13			
Through & Spec.		17	208	52	38			4
Total each grade ..	1	355	2252	367	634		3	29
Total oats								3641

RYE.

Railroad.	1	2	3	No Grade.
C. B. & Q.		6	4	1
C. R. I. & P.		6		
C. & A.			1	
Illinois Central ..			1	
Freeport Div.		2	7	
Galena Div. N. W. ..		8	5	
Wisconsin Div. N. W.		9	3	
Wabash		1		
C. & E. I.			3	
C. M. & St. P.		8	4	
Wisconsin Central ..		2		
C. G. Western		1	7	
A. T. & S. Fe.		5	2	
Through & Spec.		71	10	
Total each grade ..		119	47	1
Total rye				167

BARLEY.

Railroad.	Bay Brewing.	Chevalier.	3	4	5	No Grade.	Total No. Cars by Each Road.
C. B. & Q.			54	48	2		2514
C. R. I. & P.			5	16			748
C. & A.							363
Illinois Central ..			1				1046
Freeport Div.			13	32	1		368
Galena Div. N. W. ..			10	6	1		1066
Wis. Div. N. W.			127	197	31	1	789
Wabash							295
C. & E. I.							389
C. M. & St. P.	5		267	191	2	9	2072
Wisconsin Central ..			6	2			38
C. G. Western			11	93			1221
A. T. & S. Fe.							1399
Through & Spec.			1				2676
Total each grade ..	2	5	495	585	37	10	
Total barley						1134	
Total all grain							14,984

FLAXSEED AT CHICAGO.

The monthly receipts and shipments of flaxseed at Chicago during the past fifteen months, as reported by S. H. Stevens, flaxseed inspector of the Board of Trade, were as follows:

Months.	Receipts.		Shipments.	
	1893.	1892.	1893.	1892.
January	396,550	782,650	323,261	296,355
February	187,550	556,050	233,556	200,884
March	367,950	592,900	333,257	223,395
April		547,800		702,589
May		309,650		743,930
June		563,750		577,002
July		612,700		806,375
August		729,300		1,039,113
September		761,750		974,668
October		1,452,000		1,150,685
November		1,395,350		1,365,880
December		743,050		228,060
Total	952,050	9,046,950	889,073	8,278,936

RECEIPTS AND SHIPMENTS AT CHICAGO.

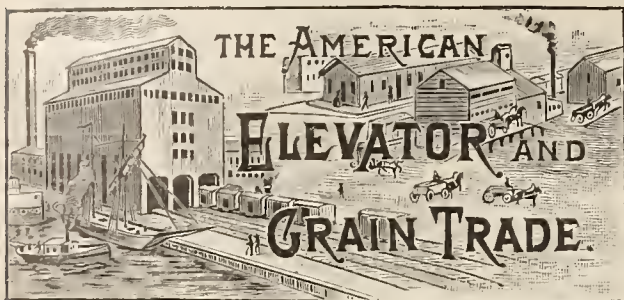
The following table, compiled by George F. Stone, secretary of the Board of Trade, shows the receipts and shipments at Chicago during March, 1893 and 1892, of seeds, hay and broom corn:

Repts.	Timothy lbs.	Clover lbs.	Other grass seeds lbs.	Flax-seed bu.	Broom corn, lbs.	Hay, tons.
1893...	3,505,190	665,733	1,252,945	272,385	1,733,400	21,395
1892...	6,740,998	714,648	1,481,645	607,108	353,550	19,726
Ship'ts						
1893...	8,267,251	1,561,697	461,836	321,460	2,090,311	3,688
1892...	5,578,374	1,428,036	1,084,826	337,891	401,443	1,923

RANGE OF PRICES AT CHICAGO.

The daily range of prices of grain for March delivery at Chicago since March 15 and for April delivery since April 1 has been as follows:

MARCH.	WHEAT.			CORN.			OATS.			RYE.		BARLEY.		FLAX SEED	
	Low.	High.	Closing.	Low.	High.	Closing.	Low.	High.	Closing.	Low.	High.	Low.	High.	Low.	High.
15	72 $\frac{1}{2}$	73 $\frac{1}{2}$	73	40 $\frac{1}{2}$	41 $\frac{1}{2}$	41 $\frac{1}{2}$	30 $\frac{1}{2}$	30 $\frac{1}{2}$	30 $\frac{1}{2}$	53	40	54	121	121 $\frac{1}{2}$	
16	73 $\frac{1}{2}$	74 $\frac{1}{2}$	73 $\frac{1}{2}$	41 $\frac{1}{2}$	42	42	30 $\frac{1}{2}$	30 $\frac{1}{2}$	30 $\frac{1}{2}$	50	44	59	121	121 $\frac{1}{2}$	
17	73 $\frac{1}{2}$	74 $\frac{1}{2}$	74 $\frac{1}{2}$	41 $\frac{1}{2}$	42	41 $\frac{1}{2}$	30 $\frac{1}{2}$	30 $\frac{1}{2}$	30 $\frac{1}{2}$	50	43	60	121	121 $\frac{1}{2}$	
18	74	74 $\frac{1}{2}$	74 $\frac{1}{2}$	41 $\frac{1}{2}$	41 $\frac{1}{2}$	41 $\frac{1}{2}$	30 $\frac{1}{2}$	30 $\frac{1}{2}$	30 $\frac{1}{2}$	50	44	60	121	121 $\frac{1}{2}$	
19															
20	73 $\frac{1}{2}$	74	73 $\frac{1}{2}$	41	41 $\frac{1}{2}$	41 $\frac{1}{2}$	30 $\frac{1}{2}$	30 $\frac{1}{2}$	30 $\frac{1}{2}$	50	50	42	65	121	121
21	73	73 $\frac{1}{2}$	73 $\frac{1}{2}$	40 $\frac{1}{2}$	41 $\frac{1}{2}$	41	30 $\frac{1}{2}$	30 $\frac{1}{2}$	30 $\frac{1}{2}$	50	50	48	63	121	121
22	73	73 $\frac{1}{2}$	73 $\frac{1}{2}$	41	41 $\frac{1}{2}$	41 $\frac{1}{2}$	30 $\frac{1}{2}$	30 $\frac{1}{2}$	30 $\frac{1}{2}$	50	50	42	64	121	121
23	73 $\frac{1}{2}$	73 $\frac{1}{2}$	73 $\frac{1}{2}$	41	41 $\frac{1}{2}$	41 $\frac{1}{2}$	30 $\frac{1}{2}$	30 $\frac{1}{2}$	30 $\frac{1}{2}$	49	50	42	65	120 $\frac{1}{2}$	120 $\frac{1}{2}$
24	73 $\frac{1}{2}$	74 $\frac{1}{2}$	74 $\frac{1}{2}$	40 $\frac{1}{2}$	41 $\frac{1}{2}$	40 $\frac{1}{2}$	30 $\frac{1}{2}$	30 $\frac{1}{2}$	30 $\frac{1}{2}$	49	49	43	65	120	120 $\frac{1}{2}$
25	74	75	75 $\frac{1}{2}$	40 $\frac{1}{2}$	41 $\frac{1}{2}$	40 $\frac{1}{2}$	29 $\frac{1}{2}$	30 $\frac{1}{2}$	30 $\frac{1}{2}$	49	49	43	65	120	120 $\frac{1}{2}$
26															
27	75 $\frac{1}{2}$	77	76 $\frac{1}{2}$	40 $\frac{1}{2}$	41 $\frac{1}{2}$	40 $\frac{1}{2}$	30 $\frac{1}{2}$	31 $\frac{1}{2}$	30 $\frac{1}{2}$	48	48	42	65	119 $\frac{1}{2}$	119 $\frac{1}{2}$
28	75 $\frac{1}{2}$	78	77 $\frac{1}{2}$	40 $\frac{1}{2}$	40 $\frac{1}{2}$	40 $\frac{1}{2}$	30 $\frac{1}{2}$	31	31	50	40	42	60	119 $\frac{1}{2}$	119 $\frac{1}{2}$
29	73 $\frac{1}{2}$	79 $\frac{1}{2}$	75 $\frac{1}{2}$	40 $\frac{1}{2}$	41 $\frac{1}{2}$	40 $\frac{1}{2}$	30 $\frac{1}{2}$	31	30 $\frac{1}{2}$	50	40	43	65	117	118 $\frac{1}{2}$
30	75 $\frac{1}{2}$	76	75 $\frac{1}{2}$	40 $\frac{1}{2}$	40 $\frac{1}{2}$	40 $\frac{1}{2}$	30 $\frac{1}{2}$	30 $\frac{1}{2}$	30 $\frac{1}{2}$	49	50	43	65	116	117 $\frac{1}{2}$
31															
1	75 $\frac{1}{2}$	76 $\frac{1}{2}$	75 $\frac{1}{2}$	39 $\frac{1}{2}$	40 $\frac{1}{2}$	39 $\frac{1}{2}$	29 $\frac{1}{2}$	30 $\frac{1}{2}$	29 $\frac{1}{2}$	49	50	42	60	115 $\frac{1}{2}$	117 $\frac{1}{2}$
2															
3	74 $\frac{1}{2}$	76 $\frac{1}{2}$	76	39	39 $\frac{1}{2}$	39 $\frac{1}{2}$	29 $\frac{1}{2}$	29 $\frac{1}{2}$	29 $\frac{1}{2}$	48	49	39	64	115 $\frac{1}{2}$	115 $\frac{1}{2}$
4															
5	77	78 $\frac{1}{2}$	77 $\frac{1}{2}$	40	40 $\frac{1}{2}$	40 $\frac{1}{2}$	29 $\frac{1}{2}$	30 $\frac{1}{2}$	30 $\frac{1}{2}$	49	50	43	68	114 $\frac{1}{2}$	115
6	76 $\frac{1}{2}$	77 $\frac{1}{2}$	77 $\frac{1}{2}$	40	40 $\frac{1}{2}$	40 $\frac{1}{2}$	29 $\frac{1}{2}$	30 $\frac{1}{2}$	29 $\frac{1}{2}$	50	50	45	65	112	113 $\frac{1}{2}$
7	77 $\frac{1}{2}$	79 $\frac{1}{2}$	78 $\frac{1}{2}$	39 $\frac{1}{2}$	40 $\frac{1}{2}$	40 $\frac{1}{2}$	29 $\frac{1}{2}$	30	30	51	52	43	65	112 $\frac{1}{2}$	113
8	78 $\frac{1}{2}$	80 $\frac{1}{2}$	79 $\frac{1}{2}$	40 $\frac{1}{2}$	40 $\frac{1}{2}$	40 $\frac{1}{2}$	30	30 $\frac{1}{2}$	30 $\frac{1}{2}$	52	52	38	66	113	113 $\frac{1}{2}$
9															
10	79 $\frac{1}{2}$	82	81 $\frac{1}{2}$	40	40 $\frac{1}{2}$	40 $\frac{1}{2}$	29 $\frac{1}{2}$	30 $\frac{1}{2}$	29 $\frac{1}{2}$	50	51	44	65	114	114 $\frac{1}{2}$
11	82	85	85 $\frac{1}{2}$	39 $\frac{1}{2}$	40 $\frac{1}{2}$	40	28 $\frac{1}{2}$	29 $\frac{1}{2}$	28 $\frac{1}{2}$	50	50	46	65	115	115
12	82	88	84 $\frac{1}{2}$	39 $\frac{1}{2}$	40 $\frac{1}{2}$	40 $\frac{1}{2}$	27 $\frac{1}{2}$	28 $\frac{1}{2}$	28 $\frac{1}{2}$	50	50	45	63	116	117 $\frac{1}{2}$
13	78	84	78 $\frac{1}{2}$	40	40 $\frac{1}{2}$	40 $\frac{1}{2}$	28 $\frac{1}{2}$	28 $\frac{1}{2}$	28 $\frac{1}{2}$	50	50	42	63	116	118
14	76 $\frac{1}{2}$	78 $\frac{1}{2}$	77 $\frac{1}{2}$	39 $\frac{1}{2}$	40 $\frac{1}{2}$	40 $\frac{1}{2}$	28 $\frac{1}{2}$	28 $\frac{1}{2}$	28 $\frac{1}{2}$	50	50	45	63	116	116
.....															
31 A holiday—Good Friday. 4 A holiday—City Election.															



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A. J. MITCHELL, - - - Business Manager.

HARLEY B. MITCHELL, - - - Editor.

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This paper has a large circulation among the elevator men and grain dealers of the country, and is the best medium in the United States for reaching this trade. Advertising rates made known upon application.

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We solicit correspondence upon all topics of interest connected with the handling of grain or cognate subjects.

CHICAGO, ILL., APRIL 15, 1893.

THE LOP-SIDED DEMURRAGE CHARGE.

It has been almost a month since the last report of a grain blockade, car famine and delay of grain shipments reached this office, which is the longest period the trade has had even fair service, without interruption, since the last crop was harvested. Carriers have persistently continued to extend the territory for the demurrage extortion, but have not signified their intention of paying shippers anything for delaying grain in transit or at points of shipment, and what is worse shippers have not even asked them to do so.

No good reasons can be advanced for the maintenance of a one-sided charge for delay. If carriers earnestly desired to secure the prompt delivery of freight which they claim is their only aim in charging demurrage, they should charge each for detaining the cars of the other, and grant a reduction from all freight bills for goods delayed an unreasonable time in transit or delayed at point of shipment for want of cars in which to load. The charge for delay should either be abolished altogether or else made reciprocal. As now made it is only a ruse to extort money from shippers and receivers. To reduce delays and diminish losses caused thereby to all parties, each should be charged for delaying the property of the other.

Then too, the carriers perpetrate a great injustice by charging some receivers and some shippers but not all. At competing points, and especially at Chicago, many large manufacturers never hear of such a thing as a demurrage charge. They can keep cars as long as they like without paying a cent, and at the same time country grain shippers may be losing thousands of dollars daily because they can not get cars in which to ship their grain to market. It is well known that carriers discriminate against small shippers in this matter. We doubt that the

charge could be collected in the courts. As now carried on the efforts to secure the greatest possible service from insufficient rolling stock is a glaring farce, but nothing will be done to secure better service until shippers and receivers demand it and persist in demanding it until granted.

SAMPLING GRAIN AT CENTRAL MARKETS.

We give in this issue communications from commercial exchange officials at several grain markets in regard to the sampling of grain in those markets. At New York, Philadelphia and Baltimore the sampling is under the supervision of the exchanges, the work being done by the grain inspectors. In Canadian markets the sampling is also done by the inspectors. This is better than having the sampling done by irresponsible agents, who have nothing at stake, as at Chicago.

A better plan has often been proposed and repeated efforts have been made to secure its adoption at Chicago. It is to have a sampling bureau established by the board of trade or commercial exchange at each central market and have all sampling of grain below contract grades done by the authorized inspectors of the exchange, who are under bond to faithfully and carefully perform their duty. The bureau should have storage facilities for keeping a part of each sample 60 to 90 days, for reference in case of disputes.

In markets where the sampling is done by private individuals the buyer does not always accept the samples as reliable, but sends another private sampler to get a sample, and he, of course, takes the poorest he can find, so as to protect his employer in case he desires to cancel his contract. All of this takes time, delays trade, causes trouble and brings the market into dispute with the country shipper. If the sampling was done by a bureau, under the supervision of a board, buyers and sellers would have to accept the official samples taken by experts as correct, and all this trouble would be obviated.

The sample bureau, independent of the inspection department, is to be preferred to the combination of the two departments in one, because an inspector who has graded grain below contract grade will unconsciously take a poor sample to help sustain his grading.

NATIONAL GRANARIES.

A proposition, or rather a series of propositions, has been made in England which is quite revolutionary for that steady-going country. In fact, it would seem to carry us back a couple of thousand years to the palmy days of Rome and Athens when a part of the function of government was to keep the people supplied with food.

The proposal is made in sober earnest that the British Government build granaries and keep in store a large supply of grain. As to what extent the government should engage in the grain business is of course a matter of dispute. Some go so far as to assert that the government should take upon itself, to the exclusion of private parties, the importation of grain and flour. Of course so radical a proposition meets with merited opposition. Others simply want the government to build a series of national granaries capable of holding from two to six months' supply of grain, and keep buying and selling so as to constantly renew the supply. Of course this is a distinction with a very decided difference. In the one case the government actually undertakes the monopoly of the food supply, or its most important part, while in the other it simply acts as a factor or broker and would undoubtedly exercise a commanding influence on the grain trade of the world.

The proposition is not new. It has been urged with more or less force for nearly a dozen years. It is a well-known fact that England's food production is greatly inadequate for consumptive demand; and only a third of the wheat consumed is home grown. Those who are insisting on national granaries point with alarm

to the obvious fact that England could not stand a blockade; that a few months' unsuccessful warfare on the ocean would reduce England to the terms of her antagonist. The facts are not denied or deniable, but it is not shown what nation or combination of nations has the naval power to blockade the British Islands. The English are always jealous of foreign aggression and alive to the possibilities of the future. They would not sleep easy nights if they had a sea-coast like ours and such inadequate means of naval defense. Americans do not worry much about the future; and hence we can hardly appreciate the force of the argument for national granaries. If they are built, and it is quite within the bounds of possibility that they will be, it will be another evidence of the long-headed conservative policy which has made England virtually impregnable—and it will boom the grain trade.

CHICAGO INSPECTION.

Many charges have been made recently by newspapers published in Chicago and the Northwest that the state grain inspection department at Chicago has made more stringent requirements for wheat to be graded No. 2 or better than heretofore existed, the object being to assist the bulls in running their corner in May wheat. Now this is all bosh. The report is circulated for the exclusive benefit of the shorts.

The chief inspector or his assistants have not the power to change the regulations regarding the grading of grain in the least. The warehouse commission is the only body that can make changes and it must advertise the changes in the newspapers several weeks before making it. The chief as well as assistant inspectors are under bonds to follow these regulations to the letter. If they do otherwise they forfeit their bonds and lose their positions. If the inspectors desired to assist the bulls and reduce the quantity of contract wheat they could not do so, because all of their work is subject to revision by the appeals committee, which is composed of members of the grain trade, who are expert judges of grain.

It is easy for a "long" or a "short" speculator to make charges against the state grain inspection department, but unless he shows confidence in his own statements by appealing from the grading of the inspectors, his charges must be accepted as false and made only for effect.

Naturally more appeals are taken from the grading of the inspectors during the running of a corner than at any other time, and the number of appeals during the past four or five weeks has been larger than usual, but the percentage of changes has not been above the average. We have attempted, but in vain, to secure the exact number of appeals and changes made during the last two months and for the same period of last year. The appeals committee and the chief inspector have declined to give out the information, although they have nothing to lose by doing so, and would strengthen the confidence of dealers in their work which the prejudiced maligners are striving to destroy.

WILL ADMIT GRAIN CLEANING MACHINERY FREE OF DUTY.

The Russian Government is about to enforce stringent regulations requiring that export grain, which has always been notoriously impure, shall be inspected and graded as to its purity. Russia has neither the machinery for cleaning the grain nor any factories making such apparatus. In view of these facts the government has decided to permit the importation of grain cleaning machinery free of duty. An opportunity is afforded our manufacturers to supply the urgent demands for machinery to clean the 600,000,000 pounds of grain that Russia annually exports. The cleaning of export grain will be made compulsory, so that country presents an excellent field for our manufacturers of cleaning machines.

American engineers have built and equipped elevators in Russia, and the superiority of our grain handling machinery is as well recognized there as in any other part of the world. It only

remains for our manufacturers to place their machines before the trade in that country in order to work up a large business. An exposition of machinery for cleaning, drying and otherwise improving grain will be held by the government at St. Petersburg in January, 1894, and we know that many of the machines advertised in this journal will be exhibited.

THE CORN CRUSADE.

America's corn ambassador extraordinary, Mr. Charles J. Murphy, "Cornbread Murphy," who has done so much to popularize our corn in Germany, has proceeded to Denmark, and particulars are at hand of a banquet given at Copenhagen at which Minister Carr presided, to many of the notables of the Danish capital, in which dishes made from the toothsome Indian corn predominated, flanked with oysters, turkey and California fruits and wines. And it is likely that corn will soon score another victory, and the crusade proceed one more step toward final success. It is gratifying that Secretary Morton appreciates the value of Mr. Murphy's mission, and has announced that it will receive due encouragement from the department.

And in truth, nothing in behalf of agriculture and the grain trade is more deserving of encouragement than the popularizing of our corn in Europe as human food. We in North and South America understand that maize is the grain food of more people than wheat; but generally in Europe, except in Italy, Roumania and the Danube country, corn is esteemed fit only for cattle and poultry. Its scientific food value needs no demonstration; the only thing to be accomplished is to overcome foreign prejudice and teach the people, especially the poor people, how to prepare dishes from corn flour and meal. And this is Col. Murphy's mission, in which he is succeeding so admirably.

The success of his mission means much, both to us and the poor of Europe. To us it means an enhanced value on each of the 2,000,000,000 bushels of corn we produce annually. It means a steady export demand to supply the tables of rich and poor. To the masses of Europe it means cheap and wholesome food without stint, for, considering food value, corn is cheaper than wheat, even at the same price for both grains. They need our corn and we need their market; and the popularizing of Indian corn as human food will be an undisguised blessing to both continents.

UNIFORMITY OF STANDARD MEASURES.

A Washington correspondent wants the cental system used in the handling of grain to the exclusion of all others, and we doubt not that the great majority of grain dealers of the country would prefer that all the sales of grain should be made by the cental system. It would greatly simplify the handling of grain, prevent many errors and save much labor. The railroads have long billed everything by the 100 pounds and thereby saved much trouble and expense. How much better it would be if all grain was sold by the 100 pounds in all parts of the country instead of by the numerous standards established in the different states for the various grains and seeds.

The state of Washington has just reduced the weight of a standard bushel of oats to 32 pounds and added to the already great confusion of standards. A change to the cental system would for a time cause some trouble in that it would destroy the comparative value of price and crop statistics of the past, but this would soon be remedied by statisticians who would compile tables giving price and crop statistics of the past with the cental as the unit of measure. The cental system has been adopted by the American seed trade, and if the champions of this system will they can use this fact with much influence upon the members of the grain trade.

As is shown by an article in this issue taken from a journal published at Edinburgh, Scotland, the friends of a uniform standard continued to

work persistently in the United Kingdom. In that country the number of systems of weights and measures for selling grain is even greater than in this country. Nearly 200 are used in the selling of wheat and almost as many in the oats and barley trade. The result is that quotations from the various markets create bewilderment and confusion even in the minds of experts. Two sessions ago the House of Commons delegated to a select committee the task of bringing about some sort of uniformity, and that body has been reappointed. So far the preponderance of opinion has been in favor of the adoption of the one hundred weight of 112 pounds as a step toward the decimal system.

It would greatly facilitate trade between this country and the United Kingdom if both countries would adopt the cental system which is by far the best in use. Across the Atlantic the advocates of the cental system are far more aggressive than here and no opportunity is lost to make known the advantages of the system. If it were so here, the next century would not find us tenaciously holding to all of the standards established in the early days of the grain trade and which were outgrown many decades ago.

GOVERNMENT CROP REPORTS AND GOVERNMENT STATISTICIANS.

J. R. Dodge has been superseded as statistician of the Department of Agriculture by Henry A. Robinson of Detroit. The retirement of Mr. Dodge was hailed with joy by many critics which his thirty-four years of service have raised up; for Mr. Dodge was one of the most bitterly criticised men in public life. Possibly Mr. Dodge was somewhat to blame for this, for he usually treated criticisms as if they were personal assaults, as indeed, some of them were; but he lacked that dignified method of handling his critics which befits a public officer.

But now that Mr. Dodge is out and a new man in, it will probably be seen that Mr. Dodge did quite as well as any one could; perhaps better than most people. Mr. Dodge's critics were largely of two classes, speculators and would-be authorities. There are always two sides in speculation; there are always as many opinions on crops as there are authorities. Mr. Dodge could not please both sides of the speculative dealers and not one of the would-be authorities. Mr. Robinson will fare no better. If he made up his reports from divine inspiration he would have as many critics as Mr. Dodge. If his last report is a sample, he will get it worse than Dodge ever did, for it is widely at variance with state reports.

It ought to have been remembered when Dodge was statistician and it ought to be remembered now that another fills his place, that these reports are only estimates, based upon many individual reports. This is a big country. No speculator has opportunities for covering the whole field; and while the *guess* of the speculator may sometimes be nearer the truth than the report of the statistician, that does not disprove the claim that the estimates compiled from the correspondents of the department are as near the truth as estimates covering so wide a field can be expected to be.

THE SQUEEZING OF THE "SHORTS."

The bull manipulation of wheat which is expected to end in a corner, has been marked by a skirmish rising to the dignity almost of a battle between the opposing forces. Apparently the bulls are in the saddle and thus far command the situation. The pushing up of the price evidently was for the simple purpose of making the shorts run to cover and weakening their forces in the final onslaught. Pardridge and Pillsbury were the two big bears that the bulls were looking for; and both of them would seem to be seriously and one of them perhaps fatally gored. Pillsbury settled a short line estimated at a million bushels. How much more he has is not known. Pardridge is believed to have parted with something over a million dollars, or practically his fortune in cash

and convertible assets. His real estate is beyond his reach, or perhaps the little plunger would go broke or break the other fellows.

Who are in the combine on the long side is a matter of speculation. There is a large Chicago interest, represented by John Cudahy, and a Canadian interest supposed to be represented by Geddes-Kirkman. Keene's name has been freely used in connection with the manipulation. There is certainly a Wall street end of the combine, but whether it is Keene or some one else, has not developed. How much May wheat they hold, no one but themselves knows, but some estimate it at 40,000,000 bushels. All of these things will come out soon. The combination is certainly the most formable in years, and it remains to be seen whether it will be successful. Cornering is mighty uncertain business, and while the course of the market shows that the longs have their campaign well in hand, it is possible that their calculations may fail. The best laid plans have a way of doing so. So far the net results seem to be that Pardridge has been "run in" at last, and Pillsbury crowded out.

THE MINNESOTA ELEVATOR LAW.

Elsewhere in this issue we publish a digest of Minnesota's new law governing country elevators, by which an attempt is made to confiscate all grain warehouses erected on right of way of railroads. It is not so stated in the law but it amounts to the same thing, as all houses so situated must be operated as public elevators, and under the supervision of the State Board of Railroad and Warehouse Commissioners. The state has not the power to compel the man who erects an elevator for handling his own grain to receive, store and ship the grain of different owners. It may declare that hereafter no warehouse shall be erected on right of way of railroad unless the owner will do a public warehouse business. Those erected on private property may ever be operated as the owner desires.

It is clear that the new law is unconstitutional. All the elevator men have to do to avoid its obnoxious provisions is to buy grain and handle only his own grain. If the law could be enforced it would virtually compel elevator men to furnish a warehouse and act as warehouseman for the railroads for what they could make out of it. The wiseacres should have gone a step further and required the elevator men to build a house and receive all freight offered for shipment. It is a futile attempt to compel the elevator men to do work which rightfully belongs to the railroad company. The carriers should be compelled to provide ample facilities for receiving and loading grain from any who desire to ship. A bill was introduced in the Minnesota Senate requiring railroad companies to provide suitable and sufficient warehouse accommodation and other appliances for the handling and shipping of grain at all stations, but the friends of the farmer voted it down. They preferred rather to try and confiscate private elevator property, and all their labor will amount to nothing, because they went beyond the limits of the constitutional grounds.

Aside from its unconstitutionality the law contains so many egregious defects and errors that it will prove useless until amended.

The prospects are that from now until the first of June trouble will be brewing in the wheat market, and dealers that go into the market must be very cautious.

At last James W. Sykes, the Chicago warehouseman who has been persistently prosecuted for seven or eight years by Chicago banks for issuing fraudulent warehouse receipts, is free and no further attempt will be made to convict him. Of the last indictments standing against him, that for obtaining \$22,000 from the Hide & Leather Bank, was decided void, it having been done more than three years before the indictment was returned, and the others met with a similar fate. Thus ends the first important attempt to enforce the Illinois laws regulating public warehousemen.

EDITORIAL

MENTION

READERS will confer a favor by sending us news of interest to the grain trade.

THE Missouri State Grain Inspection Department will re-establish an office at Kansas City.

THE Hay and Straw Dealers' Association of New York State held its fifth annual meeting at Syracuse April 11.

BALTIMORE has made another bid for an increase in grain receipts by reducing the inspection fee from 25 to 20 cents a car.

JAMES STEWART & Co., the well-known elevator builders of St. Louis, have just taken the contract for a 260,000-bushel elevator for the Victoria mills of that city.

It seems to be only a question of time when the king bee speculators are gathered in by others of their kind. The trouble seems to be in wanting to be the biggest fish in the puddle.

By sending us the condition and acreage of growing crops and stocks of grain on hand you will confer a favor upon other readers of the AMERICAN ELEVATOR AND GRAIN TRADE.

SEND us a description of any practical device, method or process you have in use or know of for improving the quality of grain or lightening the labor of handling it, and we will publish.

THE walls and ceiling of the Iowa building at the World's Columbian Exposition are exquisitely decorated with corn, and much attention is already being called to the greatest industry of the state.

ILLINOIS grain shippers should exert themselves to have passed the bill now pending before the Illinois Legislature which prohibits public warehousemen from speculating in grain in their own house.

AN effort is being made on the St. Louis Merchants' Exchange to have No. 2 spring wheat made deliverable on contracts. Such a change might be instrumental in attracting more spring wheat to that market.

ONCE again Mexico is admitting free of duty corn, cornmeal and beans from the United States. The speculators kept prices up so high that President Diaz felt it his duty to suspend the import tax to relieve the poor.

KANSAS grain shippers should not forget that they will soon be entitled to a clean bill of lading. They should also bear in mind that the carriers are not likely to adopt the form of bill of lading required unless forced to do so.

JOHN BOYD's suit against the estate of John T. Lester of the Chicago Board of Trade, for \$40,000 due him, is nearing its end, all efforts during the past two years to secure the books of the firm having been in vain, and Boyd cannot prove that the books would show money due him as he claimed.

THE people of Rolette county, North Dakota, have hit upon a happy plan for encouraging the extension of a railroad to Dunseith. They offer to give a bonus of 3 cents per bushel for all grain sold to elevator men or shipped over the proposed line for a term of three years. By offering the bonus for grain sold to elevator men only they

would have given greater encouragement to the building of elevators, and given as great encouragement to railroad builders. In the end carrier, handler and grower, as well as the country, would have profited by such a bonus.

E. L. ROGERS & Co., 135 South Second street, Philadelphia, Pa., have recently opened a hay and straw department in connection with their business, handling it strictly on commission and charging only 50 cents per ton. Those of our readers who are interested should make a note of the firm's address.

NO GRAIN sacks will be given out by the grain dealers of Madison Co., Ind. By agreeing to discontinue the practice of loaning sacks to farmers to market their grain in, the dealers save themselves the expense of this nuisance and are enabled to pay a trifle more for grain.

THE Chicago Grain Inspection Department will exhibit at the World's Columbian Exposition its apparatus and methods of inspecting grain. It would be more profitable for the chronic bears to spend their Saturday afternoons at this exhibit than to waste their time in manufacturing reports about monster crops in Alaska and other distant lands.

A MONSTER storage elevator is being built at Chicago, and it is being done in a hurry, too. Carpenters of Milwaukee, Racine and other adjoining towns are being offered 40 cents an hour. Work is carried on day and night and strenuous efforts are being made to complete the house before May 1. When completed it will be the largest grain elevator in existence.

AN experimental shipment of grain from Kansas City to Vera Cruz, Mexico, by the water route over the Missouri and Mississippi rivers and Gulf of Mexico, was made April 10. The necessity of transfers at St. Louis and New Orleans is a drawback, but shippers generally consider the new route a good one, and will make use of it as long as Mexico wants our corn and oats.

THE Illinois Railroad and Warehouse Commission has instructed Attorney-General Moloney to take an appeal in the case of Beebe vs. the L. S. & M. S. Ry., involving the right of the state to require carriers to weigh all grain received in hopper scales. The law was recently declared unconstitutional by a Chicago judge on the ground that it interfered with interstate commerce.

GRAIN products have been defined by Messrs. Goddard and Blanchard of the joint committee of eastern roads as including, among other products, bran, brewers' meal, buckwheat, cotton seed meal, feed, grits, groats, ground corn, malt, malt skimmings, malt sprouts, middlings, mill feed, oat hulls, oil cake, oil meal, rice meal, screenings, ship stuff, shorts, sprouted barley, sugar meal and wheat meal.

AN Ontario weekly newspaper says, and we doubt not its veracity, that "a grain buyer at Dalhousie Station is going to have a by-law passed prohibiting the transportation of sawdust in sacks, as he does not like the idea of running fifty yards at a 2:40-dash and then hear the driver answer dryly 'sawdust.'" He should be thankful that the farmer did not sell the sawdust to him for No. 1 hard.

SHORTAGES are still reported on a large percentage of the shipments from the West, and most shippers submit to the loss without complaint, which is directly instrumental in maintaining the evil. If every shipper would make a vigorous protest to carrier and consignee whenever a shortage is reported they would materially help along the work of securing a clean bill of lading and the delivery of all grain received. As it is they encourage carriers in offering old,

worn-out cars for the transportation of grain, at shipper's risk; they encourage public elevator men in docking for future shrinkage, and leave a loophole open for unprincipled eastern buyers to take as much of their shipment as they desire. Shippers must first make up their minds to stop this drain on their capital and then persistently work together for relief.

AMONG the new advertisements in this issue will be found that of Wolfe & Burden of Hebron, Neb., elevator builders and contractors. They solicit correspondence and will submit plans and estimates. They study to make their houses models of convenience and durability as well as of cheapness, and ask those intending to build to consult them, believing they can save them money on the investment and future annoyance in operating.

WE direct the attention of readers to the card of Plant & Co. of this city, which appears in its appropriate column in this issue. This firm make a specialty of selling grain, hay, seeds, etc., on the Chicago Board of Trade, and in all cases make prompt returns for shipments. They also solicit orders for the purchase and sale of grain and provisions for future delivery on margins. Their market letter will be mailed free of charge on application.

SECRETARY BARNUM of the Duluth Elevator Company recently said that the elevators of his company were built on that side of the state line because the laws passed by the Minnesota Legislature were becoming burdensome, and gave it as his opinion that none of the elevators to be hereafter located at the head of the lakes would be built at Duluth. All of which goes to show that legislative meddling with business enterprise is pernicious and reacts against the best interests of the state.

THE JEFFREY MANUFACTURING COMPANY of Columbus, O., have issued a neat invitation to their patrons and the machinery public generally to inspect their exhibit at the World's Columbian Exposition. Their location is Machinery Hall, Section 26, where they display their chain belting, elevating and conveying machinery, and Department of Mines and Mining, N. E. section, ground floor, where they will show their electric and compressed air mining machinery. They want their visitors to make themselves at home. Their Chicago branch is at 48 S. Canal street.

SECRETARY MORTON of the Department of Agriculture says: "If the government is going to continue in the business of seed distribution I cannot see why it should not go a step further than now and grow the seeds itself, and thus do away with the middlemen's profits, which, according to all farmers, are one of the heaviest burdens imposed upon them." Very likely Mr. Morton would like to throw the whole seed distribution nonsense into the sea. Farmers would not relish the idea of the government competing with them in the business of growing seed.

A DESIRE to provide a more reasonable classification of public warehouses has at last made its appearance in the Illinois Legislature, and a bill has been introduced to amend the present law so as to provide that "Warehouses of Class A shall embrace elevators in the granaries of which grain is stored in bulk and in which the grain of different owners is mixed together. This class shall be located in an inspection district established by the Board of Railroad and Warehouse Commissioners, so that each district shall have within its limits a city or county whose warehouse or elevator capacity shall exceed 4,000,000 bushels. Class B shall embrace all warehouses or granaries in which grain is stored in bulk and the grain of different owners is mixed together. Class C shall embrace all other warehouses. Whenever the Railroad and Warehouse Commissioners shall establish a new district they shall notify the Governor, who shall appoint a chief grain inspector

of that district." The only change is in the requirements for warehouses of Class A. At present such warehouses must be located in towns having not less than 100,000 inhabitants. The storage capacity requirement is more in keeping with the needs of the trade and should be substituted for the senseless population requirement.

ALAS! Unless all rumors and indications are unreliable, Pillsbury, the patron saint of the farmer, the God-father of the Anti-Option bill who wept scalding tears over the low prices farmers got for their grain, has fallen from grace. For it is current gossip on the Chicago Board that Pillsbury, the boss hater of the short seller, was caught short himself a couple of million bushels or some such matter and had to settle with Cudahy and others who have been boosting the price of wheat. C. Wood Davis will faint dead away when he hears of his co-laborer's fall from grace.

RECENTLY two men determined to build a grain warehouse along the tracks of the C., M. & St. P. Ry. at Jackson Junction near West Union, Ia., in spite of the railroad company. As the building site was on the railroad's right of way it proceeded to construct a track over it, a fight ensued between farmers and track layers, in which a number were injured, several seriously. Evidently the carriers of that district have no rights which the farmers are bound to respect. A trial in the courts or an appeal to the State Board of Transportation would probably have secured justice and prevented bloodshed. As it is the farmers gained nothing but a few broken heads.

THERE is an artist in cereals at work in the Agricultural Building at the World's Fair, working in the interest of the North Dakota exhibit. His materials are wheat, corn, rye, clover seed, corn husks, flour paste, etc. One of his works of art is a mosaic nearly ten feet square. It represents an armored knight on horseback. The knight's face is made of wheat of various shades and black squaw corn colors the eyes. The shirt of mail is made of red corn, and the armor of yellow corn and timothy grass heads. The knight's flowing robe is formed of wheat in the head, and his sword of clover seed and corn. Corn silk makes a realistic tail for the prancing war-horse, whose body is made of wheat. Corn husks are cleverly arranged for the banner, which floats from a pike pole made of corn kernels. When this design is completed he begins work on a statue which is intended to convey the idea that "Columbia's favorite child, North Dakota, feeds the world." The group, with its pedestal, will measure thirty feet from the floor to its highest point. It will be made of staff and tinted with grain, corn husks and other cereals.

WEIGHING GRAIN IN PUBLIC ELEVATORS.

The board of directors of the Milwaukee Chamber of Commerce has taken extra precaution to prevent errors in weighing at the public elevators of that city for which it is to be commended by the trade. The supervision of the weighing of grain at any central market by an organized body will go far toward securing weights that are more reliable, and will inspire shippers with confidence in those weights.

Two weighmen and recording scale beams should be placed in every public elevator at central markets to prevent errors in weighing and recording weights. The directors of the Milwaukee Chamber have taken part of this precaution and adopted a report of the supervisors of inspections and weighing in which it was recommended that Chamber of Commerce weighers be appointed to supervise the weighing of all grain sent to public elevators, and that the fee for such weighing be 40 cents per car, to be paid by the receiver or person ordering grain to store.

The fee is larger than is customary, but it is

well worth more. The errors prevented and the trouble and labor saved warrants the expenditure. The weighing at all public elevators should be in charge of a disinterested party, either the state or a commercial exchange.

TO MAKE PRIVATE ELEVATORS PUBLIC.

The Minneapolis owners of country elevators have not yet determined upon any plan of action in regard to the Peterson grain bill, which became a law. They are in no hurry about it because the law does not go into effect until August 1. But the interviews published evidence a unanimity of opinion that the law is unconstitutional as well as impracticable, and the indications are that there will be a legal fight on the measure. It is probable that the elevator men will simply refuse to take out licenses. This will force the Railroad and Warehouse Commission to institute proceedings and wage the battle, leaving the elevator men on the defensive. The provisions of the bill are:

Section 1 makes all elevators and warehouses in which grain is stored and handled on railroad rights of way, other than at terminal points, public elevators, subject to the inspection of the Railroad and warehouse commission, and requires that they shall be licensed.

Section 2 provides that the operation of any warehouse without a license shall constitute a misdemeanor, and gives the courts the power to issue an injunction restraining the operation of the warehouse.

Section 3 gives the commission power to fix each year, and as much oftener as they deem proper, rules and regulations for the government of such houses, and rates to be charged.

Section 4 requires the party operating the elevator to keep a record of all grain received, stored and shipped, the weight, grade, dockage for dirt or other causes, and requires that grain shall be received into such houses without discrimination, and warehouse receipts be issued; such receipt shall state on its face the weight, grade, etc., of the grain, and shall also state that upon the return of the receipt and upon the payment of the legal charges that may have accrued for receiving, storing, delivering or handling such grain the grain shall be deliverable to the holder of the receipt either there or on track at any terminal point at the election of the owner; and in case of shipment the warehouseman shall deliver a certificate giving evidence of the shipment, etc. In case the party receiving the grain shall elect to have it deliverable at a terminal point the owner of the grain may have the right to name the point (as Minneapolis or Duluth), and the warehouseman may designate the particular warehouse at that point, and shall issue an order upon such designated warehouse for the delivery of a like quantity and quality of grain as that mentioned in the original receipt. Grain is made deliverable within twenty-four hours after demand is made, and a penalty of 1 cent a bushel for failure to make such delivery is provided for each day that such grain remains undelivered. Provided that the warehouseman shall not be held responsible for delay in case he shall deliver grain in the order that demands are made and as fast as possible. The section provides that in case a state public elevator is erected the party delivering the grain may demand that the grain be made deliverable at such state elevator as he may designate. The section also provides for the consecutive numbering of orders, and says no two shall be issued bearing the same date, in any one year. (The word "date" should probably be "number").

Section 5 provides that in case of dispute as to the grade of grain, when it is offered to the warehouse, a statement of the case shall be made out and a sample of not less than three quarts of the grain sent by express to the chief inspector, who shall determine the grade and other questions in dispute.

Section 6 provides for an investigation by the commission of complaints made against operators of warehouses. In case they find the charges sustained they may order the operator to desist, and in case of noncompliance with their orders they may prosecute him, either civilly or criminally, according to the circumstances of the case.

Section 7 provides for the issuing by the terminal elevator (on presentation of the orders referred to in Section 4) of a terminal receipt stating the net amount and grade of grain, and also the charges against the same. This certificate shall be issued if the party issuing the local order shall have in store in such terminal elevator the

amount of grain of the grade specified. In case of non-acceptance of the local orders by the terminal warehouseman (presumably when the party issuing the order has not the grain in the warehouse) the party issuing the local order shall be liable for the default to the owner of such orders to the amount of not less than one cent a bushel for each bushel per day for each day of such neglect or refusal.

Section 8 provides for an annual report from local warehouses to the commission, which report shall particularly specify and account for all overage.

Section 9 prohibits combinations or other arrangement for the pooling of earnings of different warehouses.

Section 10 provides for fine of from \$50 to \$500 for firms or incorporations, and in case of a natural person, imprisonment until the fine is paid for any of the misdemeanors specified.

INCIDENTALS.

A Chicago feed store has this sign: "Feed and hay bailed."

Wheat will be immediately shipped from North Dakota to avoid the assessment for taxes on May 1.

A. F. Brown, Ong, Neb.: "I cannot do business without the AMERICAN ELEVATOR AND GRAIN TRADE."

Over fifty sacks of different grains have been prepared at Sioux Falls for the World's Fair exhibit of South Dakota.

J. Sterling Morton, the new Secretary of Agriculture, raised over 1,500 bushels of corn on a twenty-acre lot in Nebraska last year.

Corn husks are bought from farmers at Huron, S. D., taken to the tow mill and prepared for the use of mattress makers in the East.

Milwaukee elevators, in contrast to those at Chicago, Superior, etc., have not been loading grain into vessels for shipment this spring.

One hundred thousand bushels of seed barley has been purchased in Canada for shipment to Finland, the North-eastern extremity of Russia.

Our exports of pork products have increased wonderfully the past two years, and it is believed the exports will continue to increase in 1893.

The Marshland Farming Company of Hudson, St. Croix Co., Wis., owns about 12,000 acres of fine meadow land which will be made into a hay farm.

Special legislation for the benefit of wheat growers is condemned by many farmers in the southern part of Minnesota, and it should be denounced by all.

It is reported that six helpers in the Illinois state grain inspection department at Chicago were discharged by the new chief grain inspector, George P. Bunker.

A new variety of seed oats, which it is claimed will produce 20 to 100 bushels per acre, is being exploited by agents in the neighborhood of Garretson, S. D.

North Dakota farmers are carefully cleaning the smut out of their seed wheat. Circulars on the subject are being distributed by the elevator companies and the state commissioner of agriculture.

The Interstate Wheat Palace Association, recently organized at Aberdeen, S. D., will be incorporated with power to hold a grand wheat exposition next fall, in connection with the South Dakota State Fair.

Broom corn valued at \$7,753 was exported in February, against \$24,974 in February, 1892; and \$98,629 in the eight months ending with February, against \$193,242 in the corresponding period of 1891-2.

Seed grain money is withheld from the most needy in Stevens Co., Minn., because the amount is by the law a tax on the land, and those having no title to their land cannot legally participate in the distribution.

A peculiar ear of corn is in the possession of a man living at Auselain Springs, N. C. Thirteen ears, all containing well developed grain, are grouped around the large central ear. The whole grew in one shuck.

St. Louis is indignant over the circulation of a story of alleged weevil in wheat stored there. There is probably no truth in the story, but as most of the crop damage stories originate in that city, this one has probably crawled in doors.—*Trade Bulletin, Chicago.*

ELEVATOR

GRAIN NEWS

Salem, Ore., is to have a flax mill.

Ennis, Tex., is to have a cotton seed oil mill.

Rising City, Neb., is to have a farmers' elevator.

A cotton seed oil mill will be built at Roanoke, Ala.

G. L. Gray will build a tow mill at Aherdeen, Minn.

H. S. Ball, grain dealer at Salinas, Cal., has sold out.

A cotton seed oil mill will be built at Kaufman, Tex.

A. Truttel will start a broom factory at Waxahachie, Tex.

An elevator will be built by the farmers at Medora, Man.

Brown & Hatch are building a tow mill at Pipestone, Minn.

South Superior, Wis., is to have three new grain elevators.

A broom factory has been started in the penitentiary at Joliet, Ill.

A rice mill, costing \$200,000, is to be built at Natchitoches, La.

Send us the news of your district of interest to the grain trade.

Mulford & Co. will build an elevator, it is said, at Superior, Wis.

Diffy & Smith of San Marcos, Tex., will build a cotton seed oil mill.

Acker & Sands, elevator men at Tomah, Wis., have dissolved partnership.

A. E. Johnson of Paxton, Ill., will move his hemp mill to Beatrice, Neb.

James Cumming will build a 30,000-bushel elevator at Lyn, Ontario, Canada.

Mr. Marsh of Minnesota has bought the elevator of B. Jackson at Dunlap, Ia.

The Hays City Mill & Elevator Company of Hays City, Kan., has sold out.

The National Cotton Seed Oil Company will build an oil mill at Denison, Tex.

Georgetown, Tex., is to have a cotton seed oil mill of thirty tons' daily capacity.

C. J. Watson, grain dealer at Dundee, N. Y., has been succeeded by Horton & Ellis.

The St. Jean Grist Mill & Elevator Company has been incorporated at St. Jean, Man.

An elevator will soon be built at West Superior, Wis., for the "Grand Republic Mill."

The farmers in the vicinity of Brownsdale, Minn., are talking of building an elevator.

The people of Slayton, Minn., have subscribed \$800 to start the new farmers' elevator.

Shipments of contract grade wheat from Toledo and Detroit to Chicago are talked of.

George Heaton, grain dealer at Perry, Ia., has been succeeded by J. W. Jones & Co.

H. E. Watson, dealer in grain and farm machinery at New Haven, Mich., has sold out.

E. Rhodes, grain dealer and proprietor of a general store at Cushman, Ill., has sold out.

The Pacific Elevator Company contemplates building a 90,000-bushel warehouse at Elberton, Wash.

A. C. Welch will buy the elevator at Glencoe, Minn., and engage in the grain business.

R. C. Bailey and R. Wehr, grain dealers at Hoisinton, Kan., have dissolved partnership.

The Chesapeake & Ohio Railroad Company will build a grain elevator at Richmond, Va.

Skovlin & Sorlein, grain dealers at Bode, Ia., have been succeeded by Swen, Sorlein & Co.

G. H. Bean, dealer in hay and proprietor of a general store at Hume, N. Y., has sold out.

R. A. Traver, dealer in broom corn and hay at Mattoon, Ill., is financially embarrassed.

The Wisconsin Malt & Grain Company of Appleton, Wis., is erecting additional buildings.

The Danville Brewing Company has been incorporated at Chicago, Ill., with \$100,000 capital.

Jay M. Orcutt, who formerly swindled Michigan farmers by the Bohemian oats scheme, is dead. It is esti-

ated that he secured \$25,000 by his swindling operations.

The Fox River Distilling Company has been incorporated at Chicago with \$250,000 capital.

Palmetier & Grinagier, grain dealers at Lisbon, N. D., have been succeeded by W. T. Palmetier.

A 200,000-bushel elevator will be built at Quincy, Ill., in connection with the "Gem City Mills."

The Interstate Grain Company will, it is said, build an annex to its elevator at Minneapolis, Minn.

The Alvo Elevator Company, dealing in grain and farm machinery at Alvo, Neb., has sold out.

The rumor that a 1,000,000-bushel elevator is to be built at Buffalo, N. Y., has no foundation in fact.

The Dotterweich Brewing Company has been incorporated at Olean, N. Y., with \$125,000 capital.

The East Side Brewing Company has been incorporated at Detroit, Mich., with \$25,000 capital.

W. N. Potter & Sons of Greenfield, Mass., have just placed a new 40-horse engine in their elevator.

Van Valkenburg & Son, the grain dealers of Nebraska, will build a 60,000-bushel elevator at Lincoln.

H. R. Wilkins of Milwaukee is making arrangements to build two grain elevators at Superior, Wis.

McNichol & Gendron, dealers in grain and flour at Sherbrooke, Que., have dissolved partnership.

The Western Storage & Warehouse Company of Kansas City, Mo., will build a six-story warehouse.

The farmers near Garfield, Minn., are forming an association to build an elevator and deal in grain.

The Moline Elevator Company of Moline, Ill., has increased its capital stock from \$20,000 to \$30,000.

The Crowley Rice Mill Company has been formed at Crowley, La., to build a mill. Capital \$100,000.

The Monumental Distillery Company has been incorporated at Baltimore, Md., with \$100,000 capital.

The Columbia Distillery Company has been incorporated at Fort Worth, Tex., with \$100,000 capital.

The Interior Elevator Company of Minneapolis, Minn., contemplates building a 1,000,000-bushel elevator.

G. W. Van Dusen & Co. will rebuild their elevator at Redwood Falls, Minn., which was recently burned.

A large grain elevator will be built at Virden, Man., by Mr. Caldwell, Member of Parliament for Lanark.

Trowbridge & Womeldorf, dealers in grain, coal and live stock at Neligh, Neb., have dissolved partnership.

The Grandview Cottonseed Oil Mill Company has been incorporated at Grandview, Tex., with \$40,000 capital.

The Duluth Feed and Storage Company has been incorporated at Duluth, Minn., with \$15,000 capital stock.

Stair, Christenson & Case, whose elevator at Heron Lake, Minn., was burned a few months ago, will rebuild.

The new "Globe Distillery" at Pekin, Ill., has been started. It consumes 3,000 to 4,000 bushels of grain per day.

W. H. Olds of Tulare, S. D., on the C., M. & St. P. Ry., will build a 20,000-bushel elevator the coming summer.

The Crescent Cotton Oil Company of Memphis, Tenn., is building an oil mill costing \$100,000 at Little Rock, Ark.

A floating elevator is to be stationed at Prescott, Ont., the coming season by the Montreal Transportation Company.

A hay warehouse, costing \$20,000, is to be built at Baltimore, Md., by the Northern Central Railway Company.

The Waukesha Elk Spring Brewing Company has been incorporated at Waukesha, Wis., with \$150,000 capital stock.

Rushmore, Minn., is to have an elevator, for which the farmers have already subscribed several hundred dollars.

An elevator of from 25,000 to 40,000 bushels' capacity will be built this summer at Melita, Man., by the farmers.

A million bushel elevator, costing \$350,000, will be built at Minneapolis, Minn., by the Washburn-Crosby Company.

Swanell's elevator at Chicago was recently declared "regular" by the Board of Trade. Its capacity is 100,000 bushels.

The Eberhart & Ober Brewing Company of Allegheny City, Pa., will rebuild its large grain elevator which was burned April 4.

A corn elevator of 100,000 bushels' capacity is to be built at Uniontown, Ky., by the proprietors of the "Rich Grain Distillery."

The firm Roy & Co. has been incorporated at Seattle, Wash., with \$50,000 capital stock, to carry on a wholesale grain, grocery and provision business. The mem-

bers of the firm are Eugene Roy, A. B. Graham and W. E. Hagen.

The Farmers' Terminal Warehouse Company has decided to erect its new house at Tacoma, Wash. Plans are being prepared.

Sliger & Chamberlain, dealers in grain and proprietors of a general store at Phelps City, Mo., have been succeeded by J. M. Sliger.

A large elevator will be built at Fort Wayne, Ind., by a stock company which is being organized among the business men of the city.

J. S. Hawkins & Co., grain dealers at Wilmore, Ky., have made an assignment to L. H. Willis. Assets \$45,000; liabilities unknown.

The elevator which is being built at Duluth, Minn., by the Duluth Roller Mill Company, will have a capacity of 250,000 bushels of wheat.

The inspected receipts of wheat at Winnipeg during the five weeks ending April 1 were 534 cars, against 1,616 cars for the corresponding weeks last year.

James Rowe, the grain dealer at Wilton, Ia., has placed in his elevator a gas engine and is using it to grind feed and elevate grain.

Flax mills of the A. P. Dickey Manufacturing Company's make at Racine, Wis., are being put in at Odebolt, Ia., and Lamherton, Minn.

Over 300 men are at work on the "Belt Line Elevator" at Superior, Wis., which is to be completed May 1 by the Barnett & Record Company.

F. P. Rush & Co. have cleared away the debris of their burned elevator at Indianapolis, Ind., and are erecting a new house on the old foundation.

Moomaw & Harrington, grain dealers at Northville, S. D., have been succeeded by Geo. A. Moomaw & Co., with headquarters at Minneapolis, Minn.

Willoughby & Wallace, dealers in grain, produce and farm machinery at Clyde, Mich., have been succeeded in the grain business by W. W. Baker.

Barbour & Younkens of New Sharon, Ia., have put in an overhast separator, made by the A. P. Dickey Manufacturing Company of Racine, Wis.

On the charge of having been too lenient with grades a Chicago inspector was recently transferred from the Goose Island district to another station.

Armour is building an elevator of 3,500,000 bushels' capacity at Chicago. The Simpson & Robinson Company of Minneapolis is doing the work.

Taylor Bros. have put in a second overhast separator, made by the A. P. Dickey Manufacturing Company of Racine, Wis., this time at Atlanta, Neb.

W. W. Barnhouse, dealer in grain, coal and live stock and proprietor of a general store at Adams, Neb., has been succeeded by Barnhouse & Yockey.

Latimer Bros., at Huntley, Ill., have put in their elevator an overhast separator, made by the A. P. Dickey Manufacturing Company of Racine, Wis.

W. H. Olds of Tulare, S. D., has bought of E. G. Burgess of Hitchcock his grain warehouse and other buildings at Spottswood on the Milwaukee road.

The Barnard & Leas Manufacturing Company of Moline, Ill., has recently sold one Little Victor Corn Sheller and Cleaner to Munson Bros. of Utica, N. Y.

Marks King of Port Arthur, Ont., is looking for apparatus to feed the offal of grain cleaning machines into the boiler furnaces of his elevator at Port Arthur.

Linton, Chandler & Co. will build at South Superior, Wis., two grain elevators of 500,000 bushels' capacity, to be well equipped with grain cleaning machinery.

One No. 2 Barnard Oat Clipper was recently bought of the Barnard & Leas Manufacturing Company of Moline, Ill., by the American Cereal Company of Chicago.

The Nordyke & Marmon Company of Indianapolis is building a grain elevator and flour mill at Montezuma, Ind., for the Montezuma Mill & Elevator Company.

George Meisner of Shelton, Neb., recently bought a three-roller corn and feed mill of the Willford & Northway Manufacturing Company of Minneapolis, Minn.

T. J. Thompson's damage suit against the owners of the "Star Elevator" at Minneapolis, Minn., which fell upon and crushed his feed mill, will soon have a retrial.

T. G. Dunn of Wyman, Ia., is doing his general cleaning with a Dickey Overhast Separator, recently bought of the A. P. Dickey Manufacturing Company of Racine, Wis.

The Farmers' Elevator Company at Syracuse, Neb., has put in the A. P. Dickey Manufacturing Company's Overhast Separator to do the cleaning for their new house.

"Hess Elevator A" of 300,000 bushels' capacity was recently declared "regular" under the emergency rule by the directors of the Chicago Board of Trade at a special meeting.

The "Cyclone Elevator" is among the first to begin business at Buffalo, N. Y., this season. The "Cyclone" recently unloaded a cargo of flaxseed from a steamer into wagons for local delivery. The elevator will be towed

into the Erie basin and anchored there in readiness to transfer cargoes arriving from the West when navigation opens.

The farmers in the vicinity of Brandon, Man., will build or buy an elevator, and have appointed Messrs. Postlethwaite, Middleton and Nicol a committee to secure b'ids, etc.

N. W. Hoag, grain dealer at Delavan, Wis., recently bought a three-roller feed and cornmeal mill of the Willford & Northway Manufacturing Company of Minneapolis, Minn.

L. H. Wellington of Morris, Minn., recently bought a Willford Three-Roller Corn and Feed Mill of the Willford & Northway Manufacturing Company of Minneapolis, Minn.

John Starbuck, who operated a branch at Muncie, Ind., of the 'Chicago Stock, Grain and Provision Exchange' decamped recently with \$400 belonging to his customers.

The Barnard & Leas Manufacturing Company of Moline, Ill., has recently sold one Little Victor Corn Sheller and Cleaner to the Case Manufacturing Company of Columbus, O.

The partnership having been dissolved the business of the 'Farmers' Elevator' at Faribault, Minn., will be conducted by Messrs. A. J. Bell and W. W. Howard, John Jepson retiring.

The S. Y. Hyde Elevator Company of La Crosse, Wis., has been incorporated as a stock company, with \$200,000 capital. The company will continue to operate its many country houses.

The Farmers' Mutual Grain & Stock Company has been incorporated at Milford, Ill. Capital stock, \$600; incorporators, William Reed, G. W. Rosenberg, B. T. Scott and G. C. Smith.

The C. F. Listman Company has been incorporated at Chicago to deal in grain, flour and provisions. Capital stock, \$100,000; incorporators, James Wood, P. L. Randall and H. C. Pooley.

James Stewart & Co. of St. Louis, Mo., designers and builders of grain elevators, have just been awarded the contract to build a 250,000 bushel house for the 'Victoria Mills' of that city.

The Excelsior Warehouse Company has been incorporated at Spangle, Wash. Capital stock \$100,000; incorporators, C. Geason, D. Osten, J. W. Hodgson, F. D. Palmer and George Fellows.

Jno. T. Snodgrass & Co., commission grain dealers on the Chicago Board of Trade, failed recently. They had on hand deals in hand for customers who failed to respond promptly to calls for margin.

Evans & Hare of Murdock, Neb., finding that their grain business was assuming such proportions as to occupy all their time, recently sold their business in farm machinery to Rikli & Neitzel.

The firm of Bishop & Co. has been incorporated at Chicago to deal in grain and provisions. Capital stock \$10,000; incorporators Edward G. Rowyer, William E. Bishop and William W. Gardner.

E. F. Serviss, president, and D. W. Troup, secretary, of the Kansas City Board of Trade, have visited the grain men of New Orleans, La., to facilitate the exportation of Kansas grain via that point.

The Huron Manufacturing Company of Huron, S. D., has adopted the Dickey Overblast Separator for its flax cleaning. This machine is made by the A. P. Dickey Manufacturing Company at Racine, Wis.

W. R. Vanderveer of McCool Junction, Neb., recently bought a three-roller feed and cornmeal mill of the Willford & Northway Manufacturing Company of Minneapolis, Minn., for his elevator at that point.

The Charleston Grain Exporting Company has been organized at Charleston, S. C., to transact the large business expected as the result of the recent reduction of the freight rates from the West to that point.

A. W. Harris, grain dealer at Sibley, Ocheyedan and Archer Grove, Ia., has failed. A bill of sale of his elevators was given April 7 to the Northwestern State Bank of Sibley, to secure an indebtedness of \$25,000.

The elevator at Savannah, Ga., which cost \$100,000 to build and which has stood idle for several years, will be overhauled and made ready for business. At present the house is owned by the Central Railroad & Banking Company.

Bids were opened April 1 for the construction of an elevator at Kansas City, Mo., for the National Elevator Company, recently organized by the grain dealers of the city. The capacity is to be 150,000 bushels, and the cost \$20,000.

As the storage capacity of the elevators at Buffalo, N. Y., is 12,720,000 bushels and as less than 3,000,000 bushels of grain is now in store, it will be seen that that port is well able to take care of a large business when navigation opens.

Moore & Gill, commission grain dealers of Kansas City, Mo., have brought suit against the Kansas City Commercial Exchange for \$15,000 damages, alleging that their business, which was worth \$10,000 a year, was ruined because of the refusal of the Commercial Ex-

change to permit them to do business as members of the exchange. Moore & Gill were members, but had to withdraw for refusing to arbitrate a dispute between themselves and Hoke & Co., a grain firm of Mexico.

McEwan & Root of Vilets, Kan., have recently bought of the Barnard & Leas Manufacturing Company, Moline, Ill., a complete outfit of machinery for a grain elevator, including one No. 0 Victor Corn Sheller and one No. 0 Coruwall Corn Cleaner.

The farmers of Nicollet and Le Sueur counties have organized a company at St. Peter, Minn., to build a grain elevator. Seven directors have been elected: Alva Pettis, S. H. Pettis, Jens Hanson, John Turrittin, John Kendall, B. S. Muer and Bernard Fay.

Murry Nelson some time ago placed fireproofing on his elevators at Chicago and the Insurance Companies reduced the rate from 1.25 to 1.15. The reduction is quite an item to him, as he carries about \$150,000 insurance on his houses, the National and the Keith.

The 'Neely Elevator' at Chicago, which was originally a packing house, will soon pass under the control of a new stock company. The property is incumbered with five mortgages. At present the storage capacity is 800,000 bushels. Improvements are contemplated.

The Superior Transfer Elevator Company has been incorporated at Superior, Wis. Capital stock \$75,000; incorporators E. C. Kennedy, P. M. Chandler and H. T. Fowler. Mr. Fowler is president, Mr. Chandler secretary and general manager, and E. M. Linton of Minneapolis treasurer. An elevator will be built.

The Butte Manufacturing, Power & Elevator Company has been incorporated at Butte, Neb., with \$25,000 capital stock. A grain elevator, a flouring mill and an electric lighting plant will be established. The power will be transmitted over electric wires from a dynamo driven by a turbine water wheel on a river six miles distant.

The Minnesota Senate has passed the bill appropriating \$200,000 to build a 1,500,000-bushel elevator at Duluth. The Lower House is not likely to vote against the bill. The funds are to be taken from the grain inspection department's accumulations, now amounting to \$85,000, but which will be swelled by increasing the inspection fees.



C. J. Witmer is in charge of Cargill Bros.' elevator at Lakefield, Minn.

Kindly send us information about grain dealers who get married or move, for this department.

Frederick Gerboth was recently elected president of the Farmers' Elevator Company of Sleepy Eye, Minn.

Samuel P. Jones of Anthony, Kan., who was appointed state grain inspector by Gov. Llewelling of Kansas, took possession of his office recently.

R. P. Thompson has resigned his position as chief grain inspector for the state of Nebraska in order to engage in the grain business at St. Louis, Mo.

Joseph Mastrie has resigned his position as assistant manager of the Nye & Schneider Company to take a similar position with the Crowell Lumber & Grain Company at Howell, Neb.

CONSIGNING EXPORT HAY.

We have received a letter from a Western shipper of hay to England, says the *Montreal Trade Bulletin*, but we regret that owing to his violent and ultra libelous language we deem it wise not to publish it, notwithstanding that he signs his name to the letter. The idea of naming an English firm and dubbing it a 'd---d thief' is going beyond the bounds of newspaper journalism even in the form of correspondence. After reading the letter we decided not even to refer to it; but upon being satisfied from the particulars given that there certainly was cause for righteous indignation, we thought, in the interest of the trade at large, that some notice should be taken of it. In brief, a Western firm shipped a lot of good No. 2 hay (every bale of which was inspected and found of excellent quality) to an English house which had solicited his consignment of hay; and to his surprise the account sales only netted him \$6.50 per ton, although other shippers had sold to other houses in the same city, on a c. i. f. basis which netted them \$9.50 per ton, the hay as alleged being no better. It is, of course, possible that as the shipment arrived on the other side about the time the heavy supplies glutted the markets there, the receivers got panicky and flung the hay on the market for whatever it would fetch. It is known that very low prices were realized through some of the banks forcing sales, in order to get their advances a short time since. It is feared, however, that some houses take advantage of such times in order to make money, by returning less than they actually receive. As a rule we believe hay is not consigned.

Fires, Casualties, Etc.

Butler & Hoffman, grain dealers at Vail, Ia., recently suffered loss by fire.

An elevator at Miller, S. D., containing 45,000 bushels of grain, was recently burned.

Popel & Giller's brewery at Warsaw, Ill., was burned April 5. Loss \$12,000; insured.

An elevator, warehouse and twelve loaded cars were burned recently at Arkansas City, Ark.

James Walsh & Co.'s distillery at Covington, Ky., was burned March 18. Loss \$250,000; insured.

Pitman & Harrison, dealers in grain and hay at Sherman, Tex., recently suffered loss by fire. Insured.

James M. Morrison, dealer in grain and lumber at Cape Girardeau, Mo., recently suffered loss by fire.

A tornado destroyed the grain elevator at Akron, Ia., April 11. The debris was deposited on the opposite side of the street.

F. W. Herline's elevator near Mapleton, N. D., was burned recently, with 28,000 bushels of wheat. He had the grain insured.

The 'Alliance' elevator and mill at Tipton, Ind., was badly damaged recently by fire which started from sparks from a passing locomotive.

The 8-year old child of James Wileox was recently caught in the machinery of his elevator at Wetmore, Kan., and crushed to death.

The large elevator and mill at Flint, Mich., owned by the Thread Flouring Mill Company were burned recently with 30,000 bushels of wheat.

Michael Bros' hay-pressing establishment at Assumption, Ill., was destroyed by an incendiary fire March 24. Loss \$8,000; insurance \$4,000.

Two grain elevators at Vail, Ia., owned by Messrs. Hoffman and McHenry, were burned on the night of April 3. Loss \$15,000; partly insured.

The 'National Elevator' at Wheaton, Minn., collapsed March 17, spilling 50,000 bushels of wheat over the ground and causing heavy loss. No one was hurt.

George Hoch, dealer in grain and lumber at Seales Mound, Ill., committed suicide March 18 by shooting himself through the head. Ill health had impaired his mind.

Five men working on the new 'Harrington Elevator' at West Superior, Wis., were badly hurt April 4. A scaffold gave way, precipitating them sixty feet to the ground.

R. B. McDonald's distillery and mill, etc., at Falmouth, Ky., were burned March 20. The grain elevator was saved with its contents damaged. Loss \$40,000; no insurance.

James Johnson, employed in a malt house at Greenbush, N. Y., went into a grain bin to repair a chute recently, when his foot slipped, causing him to fall beneath the incoming grain. He was smothered.

Three grain elevators at Litchfield, Ill., owned by Kehler Bros., millers, were destroyed by a dust explosion and fire at 3:30 p. m., March 21, with 125,000 bushels of wheat. Loss \$200,000; insurance \$100,000. Their flour mill was also destroyed.

The old 'Kansas Elevator' at Armourdale, Kan., was burned at 8:30 p. m., March 20. Three empty and six loaded grain cars were also destroyed. The fire started in the scale room on the third floor, and is believed to be of incendiary origin. Loss \$15,000; insurance \$12,000.

The elevator of the Eberhardt & Ober Brewing Company at Allegheny City, Pa., was burned to the ground April 4 with 95,000 bushels of malt and barley. Loss \$75,000 on elevator, and \$70,000 on malt and barley. Insurance on elevator and other buildings \$44,000; on malt and barley \$50,000. The fire started in the adjacent paper warehouse of Godfrey & Clark.

Frank Marshall's elevator at Chicago was burned March 28. The fire broke out at 2:30 a. m., and in less than an hour the building, which was 80x120 feet and 100 feet high, was in ashes. Overheated machinery is given as the cause of the fire. The building had a capacity of 100,000 bushels and was well equipped with machinery for improving oats, of which it contained at the time of the fire 25,000 bushels. The elevator was new, having been built on the site of one destroyed by fire two years ago. Loss \$45,000; insurance, on oats \$7,000, on building \$17,000.

James J. Corbett, the victorious boxer, was once employed in the grain business at San Francisco, Cal. If he were running a country elevator perhaps the sly granger would not try to cheat him with dirt, rocks and railway iron in grain.

ITEMS FROM ABROAD

Near Dedeagatch, Turkey, the crops have been damaged about 50 per cent. by the hard winter.

Norway imported during the six months ending with January 434,000 quarters of rye, against 427,000 for the corresponding period ending with January, 1892.

Italy imported during the seven months ending with February 2,770,000 quarters of wheat, against 1,040,000 quarters during the corresponding months of 1891-2.

Belgium imported during the seven months ending with February 1,470,000 quarters of wheat and flour combined, against 2,180,000 quarters during the corresponding period of 1891-2.

A new produce exchange is to be formed at St. Petersburg, Russia, from which Jews shall be excluded. The Hebrews are charged with grossly adulterating grain, bringing the trade into disrepute and causing loss to buyers.

All wheat grown in Germany is milled in Germany. The exports are of Russian, Roumanian or Austrian origin. The reason is that a heavy duty is levied on imports of wheat, and a bounty or drawback allowed on exports of flour made of imported wheat.

Imports of rice into Italy are discouraged by the protective duty and the abolition of the drawback. The duty benefits the landed proprietor at the expense of the consumer; and the abolition of the drawback renders unprofitable the milling of foreign rice for re-export.

Palestine produces in its northern portion a high quality of grain. In the future this product will compete in the world's markets. Caravans of camels have been relied upon to transport the grain at great expense to the sea coast. A railroad to Jerusalem was completed some time ago, and it is quite likely that a railroad will be extended to tap the rich country to the north.

Germany imported in February 310,000 quarters of wheat, 30,000 of rye, 220,000 of barley and 130,000 of corn. The total import of wheat since 1st August last has amounted to 1,800,000 quarters against 3,490,000 quarters in the corresponding period last season. A large proportion of these imports will be wheat taken from bond, or imported via Antwerp and Rotterdam.

There is some additional evidence that farmers are planting oats in place of spring wheat, as the yield per acre in money, both for the seed and the straw, is higher for the horse feed than the human food, and it is not improbable that the area under wheat, when reckoned up next summer, will prove to be under 2,000,000 acres, a grievous fall from the 4,200,000 acres of 1856-57.—*Corn Trade News, Liverpool.*

What effect upon the next wheat crop of the world will the present unexampled depression in agriculture have? The numerous failures and abject poverty of so many farmers may lead to a great deal of under-cultivation, moreover, the area will more than ever have a tendency to shrink, all the low yielding and outlying fields being abandoned or turned to other account.—*Corn Trade News, Liverpool.*

Hungary alone exported during the seven months ending with February 1,421,000 quarters of wheat, 556,000 of corn, 512,000 of oats, 502,000 of rye, 1,083,000 of barley, 2,298,000 sacks of flour and 192,000 quarters of beans; compared with 1,333,000 quarters of wheat, 987,000 of corn, 557,000 of oats, 552,000 of rye, 1,262,000 of barley, 1,927,000 sacks of flour and 344,000 quarters of beans during the corresponding period of 1891-2.

Rye is not so much used in Germany for food as in years gone by. The prominent position which rye held in the breadstuffs supply of that country has been taken by the potato, which, costing only one-third as much, is baked into cakes and eaten three times a day by the mass of the people. Fortunately for the German the crop of potatoes last year was exceptionally large, thus filling to a great extent the vacancy caused by the cessation of imports from Russia owing to the ukase.

In Turkey wheat and flour shipped from port to port has been taxed 8 per cent. for each shipment. Recently this tax was abolished, and now Constantinople and other cities may be supplied with wheat grown in the interior instead of in foreign countries. Formerly a tax on wheat or flour carried overland in the Ottoman Empire was levied by different districts, so that wheat often had to lie and rot because the different taxes on its transportation exceeded the highest price obtainable in the distant market.

France imported during the seven months ending with February 372,000 quarters of wheat, 705,000 of corn, 244,000 of oats, no rye, 505,000 of barley, 54,500 sacks of flour and 113,000 quarters of beans; against 9,685,000 quarters of wheat, 286,000 of corn, 199,000 of oats, no rye, 363,000 of barley, 582,000 sacks of flour and no beans during the corresponding period of 1891-2. The exports were, during the seven months, 496,000 quarters of wheat, 33,000 of corn, 121,000 of oats, 129,500 of rye, 191,000 of barley, 391,000 sacks of flour and 8,500 quarters of beans; compared with 434,000 quarters of wheat, 50,500 of corn, 234,000 of oats, 274,000 of rye, 840,000 of

barley, 409,000 240-pound sacks of flour and no beans, during the corresponding months ending with February, 1892.

The Argentine Republic has exported during 1892 2,160,000 quarters of wheat, 2,050,000 of corn, 230,000 of flaxseed, 5,500 of barley and 148,000 sacks of flour; against 1,820,000 quarters of wheat, 303,000 of corn, 66,000 of flaxseed, 700 of barley and 56,000 sacks of flour during 1891.

Russia exported during the period from August 1 to March 4, according to the *Messenger of Finance*, St. Petersburg, 6,060,000 quarters of wheat, 327,000 of corn, 1,492,000 of oats, 1,747,000 of rye, 2,087,000 of barley, 14,235 of buckwheat, 85,768 of millet, 94,750 of beans, 225,400 of peas and 81,242 280 pound sacks of flour; compared with 7,209,000 quarters of wheat, 1,035,000 of corn, 4,186,000 of oats, 2,890,000 of rye, 3,281,000 of barley, 124,300 of buckwheat, 151,900 of millet, 117,800 of beans, 265,000 of peas and 139,500 280-pound sacks of wheaten flour during the corresponding period of 1891-2.

Sweden imported during the seven months ending with February 322,000 quarters of wheat, 3,000 quarters of corn (since January 1), 221,000 quarters of rye, 42,000 quarters of barley, 116,500 240 pound sacks of flour, and 56,500 sacks of rye meal; against 297,000 quarters of wheat, no corn, 235,500 quarters of rye, 4,300 quarters of barley, 90,500 sacks of flour and 46,500 sacks of rye meal for the corresponding period ending with February, 1892. The exports were, oats 712,000 quarters; wheat 200; rye 850; barley 260,000; flour 2,200; rye meal 7,900; against 258,000 quarters of oats, 100 of wheat, 300 of rye, 3,000 of barley, 6,400 sacks of flour, and 800 sacks of rye meal, during the corresponding seven months ending with February, 1892.

Great quantities of corn have been shipped from the United States to Mexico during the past month as a result of the decree providing that from March 15 corn (in grain and flour) and beans, imported through the maritime and frontier custom houses of the republic, shall be exempt from the payment of import duties under conditions and terms identical with those of the decree of June 18, 1892. That decree also admitted those articles free of duty, but it expired by limitation in September, 1892. It was issued because the cereal crop of Mexico had failed, and breadstuffs in consequence had become very expensive. In issuing the decree of March 15, 1893, President Diaz explains that since the last decree had expired the price of grains in various parts of the republic had risen, and therefore he issued this decree.

OUR CARD BASKET

We have received calls from the following gentlemen prominently connected with the grain and elevator interests, during the month:

C. G. Stock of C. Stock & Son, Mitchell, Ia.
G. W. Gardiner of J. J. Blackman & Co., New York, N. Y.
H. Hamper, Greenville, Mich., representing S. Howes, Silver Creek, N. Y.
S. C. Grippen, representing the York Foundry & Engine Co., York, Neb.

IMPORT AMERICAN WHEAT.

According to the report of S. G. Brock, chief of the Bureau of Statistics, we exported 83,450,513 bushels of wheat, valued at \$67,474,596, during the eight months ending with February, of which 56,825,138 bushels, valued at \$53,018,617, was shipped to the United Kingdom, 2,006,082 bushels, valued at \$1,692,460, to Germany; 3,893,799 bushels, valued at \$3,198,972 to France; 17,657,962 bushels, valued at \$14,498,628, to other countries in Europe; 2,962,669 bushels, valued at \$2,042,037, to British North America; 35,150 bushels, valued at \$32,756, to the Central American states and British Honduras; 4,658 bushels, valued at \$4,210, to the West Indies and Bermuda; 63,919 bushels, valued at \$58,616, to Brazil; 7,733 bushels, valued at \$8,052, to other countries in South America; 12,580 bushels, valued at \$10,565, to Asia and Oceania, and 250,823 bushels, valued at \$192,520, to other countries; in comparison with a total of 119,977,433 bushels, valued at \$125,341,520, for the corresponding period of 1891-2, of which 50,792,373 bushels, valued at \$53,018,617, was shipped to the United Kingdom; 4,661,666 bushels, valued at \$1,947,552, to Germany; 35,187,347 bushels, valued at \$36,793,459, to France; 25,767,689 bushels, valued at \$27,043,445, to other countries in Europe; 3,274,182 bushels, valued at \$3,218,497, to British North America; 30,507 bushels, valued at \$34,808, to the Central American states and British Honduras; 8,890 bushels, valued at \$10,169, to the West Indies and Bermuda; 145,003 bushels, valued at \$160,615, to Brazil; 64,409 bushels, valued at \$65,436, to other countries in South America; 25,639 bushels, valued at \$25,649, to Asia and Oceania, and 19,728 bushels, valued at \$24,273, to other countries.

The correspondent of the Chicago Board of Trade at Liverpool, Eng., has been sending incorrect reports to this country about the shipments of wheat to the United Kingdom and the Continent. At one time he understated the shipments by nearly a million bushels.

WATERWAYS

The Illinois & Michigan Canal was opened April 1.

Chicago has a bigger grain fleet in harbor than ever before.

The first canal boat of the season to arrive at Toledo reached that point March 31 with a cargo of wheat.

Favorable weather the past two weeks indicates that navigation on Lake Superior will be open not much later than usual.

Last year the Sault Canal opened April 18; in 1891, April 27, and in 1890, April 20. A late opening is expected this year.

An exceptionally late opening of navigation is expected on the St. Lawrence River. The ice is thick and shows no sign of breaking up.

Rail rates from Buffalo to New York have been fixed at 6 cents for wheat, 5½ cents for corn and 4 cents for oats after the opening of navigation.

Nearly 10,000,000 bushels of grain is afloat in vessels at Chicago. The available tonnage remaining unchartered is now equal to less than 1,000,000 bushels.

A line of steamers between Duluth, Minn., and Oswego, N. Y., will be established by the New York, Ontario & Western Railroad Company, to carry grain east and coal west.

The Minnesota Legislature has instructed its representatives in Congress to ask for an appropriation with which to survey a canal from Duluth, Minn., to St. Paul, the head of navigation on the Mississippi River.

Most of the vessels that were tied up at Milwaukee during the winter have proceeded to Chicago for grain cargoes. The few owners whose boats remain are anxiously awaiting the call thither, for the three cent rate on corn is a sweet plum.

The North American Canal Company has been incorporated at Ottawa by the Canadian Parliament. The capital stock is \$20,000,000. The company will construct a canal from Lake Erie to Lake Ontario, deepen the St. Lawrence canals and cut the canal from Lake St. Francis to Lake Champlain and thence to the Hudson River in order to provide a new waterway to New York.

The *Trade Bulletin* of Montreal brands as wildcat schemes the Chignecto ship railway and the North American Canal Company, pointing out that the latter concern would have to exact eight cents per bushel of grain as toll to pay interest and operating expenses alone, whereas even now the cost of shipment from Chicago to New York is only five cents a bushel during the season of navigation.

The steamer A. L. Mason on its trip down the Missouri River April 10 carried 60,000 bushels of grain from Kansas City to St. Louis, where the cargo was transferred into Mississippi River boats to be carried to New Orleans and again transferred into a vessel that will carry the consignment to its final destination in Mexico. This is the largest cargo ever shipped from Kansas City and the first consigned to Mexico by an all water route.

Was there ever such a climb-down as that of the Canadian Government on the canal question? Their humiliation, however, was richly deserved, as it all arose out of their wrongheadedness in opposing the wishes of the merchants of Montreal. For many years the principle of favoring the St. Lawrence route has been followed without involving controversy with the United States, but last year Kingston played dog-in-the-manger, played it successfully, and the principle has had to be abandoned. It appears to us that we are now face to face with free canals and increasing trade, or taxed canals and diminishing trade; also that our friends across the line will not permanently accept anything else than reciprocity in the matter, and that the best thing for Canada is to accept the issue once and for all and give free canals, going back, in fact, to Sir Alexander Galt's policy of 1860. The value of the free canal policy to the city of Buffalo may be estimated from the fact that, according to the Board of Trade figures, the quantity of grain and flour delivered by the lake water carriers into that port last season amounted to about 182,000,000 bushels, whereas the water deliveries at Montreal were only 11,000,000 bushels.—*Trade Bulletin, Montreal.*

Secretary Morton has called home "Indian Corn" Murphy, who has been endeavoring to make known to Europe the virtues of our maize as a human food. In announcing this fact an esteemed contemporary says that Mr. Murphy's "johnnycake" will be as great a feature of the World's Fair in Chicago as it was at the Paris universal exposition. It is to be hoped that it will be much more of a feature, for it is unfortunately true that, although the French Government gave a fine site for a pavilion to be used for corn cooking and foods, Mr. Murphy could not get help from either the national government or the corn interests to build the pavilion. There was no johnnycake at the Paris exposition.

Latest Decisions.

Delay in Delivery of Goods.

A delay of nearly two months after entering into a contract for the sale of several cargoes of merchandise, to be imported on the seller's vessels, before delivering the same, is not unreasonable, where it appears that the sellers had refused to accede to the purchaser's request to change the contract so as to stipulate for prompt delivery, and that a round trip to the place whence the merchandise was to be procured might occupy from 40 to 60 days.—*Troubridge vs. Harrison, Superior Court of New York City, 21 N. Y. S.*

Carrier's Liability—Injury to Cattle.

The case of the New York, Lake Erie & Western Railroad Co. vs. Estill, recently decided by the Supreme Court of the United States, was brought to recover for injuries to live cattle in transit from Massachusetts to Missouri by a collision in Ohio. The court held that the state courts had jurisdiction of the case, and that the carrier was responsible for the difference between the market value of the cattle in good condition and as received, irrespective of the question whether it was intended to sell the cattle or to keep them for stock purposes.

Rights after Condition in the Sale of Goods Is Broken.

Where a contract of conditional sale of goods provides that the title shall remain in the seller till the price is paid in full, and that on breach of condition he shall have the right to take the goods and retain all the payments made, neither the purchaser, nor one claiming under him, can assert, in replevin brought by the seller after condition broken, that the forfeiture clause of the contract of sale is unconscionable, and that, therefore, he has an equity in the chattel.—*Thirby vs. Rainbow, Supreme Court of Mich., 53 N. W. Rep., 159.*

Carrier—Storage—Demurrage.

In the case of Harris vs. Central Railroad & Banking Co. of Georgia, recently decided by the Supreme Court of that state, it appeared that the rules of the company required payment of demurrage on goods not removed within forty-eight or sixty hours after their arrival, and also provided for the storage in warehouse of goods not removed within a certain time, the storage and drayage to be at the expense of the consignee. These rules were known to the plaintiff, who contracted with the defendant's station agent and soliciting agent that in consideration of a large shipment of freight over the defendant's railway no demurrage, drayage or storage would be charged against him. The court held that under the circumstances a breach of the contract as to storage gave the plaintiff no right of action against the defendant to recover the money paid, and that a non-suit was properly ordered.

Description of Grain in Elevator—Policy—Intention Of.

In an action on a policy of insurance on grain "contained in the elevator of the Ogdensburg Terminal Company, at Ogdensburg, N. Y.," where it appeared that the O. T. Co. operated two elevators at O., one as lessee and the other as owner; that plaintiff's grain was in the elevator operated under the lease; that the application for the insurance was made on September 8, but the policy was not written till about noon on the day following; that in the forenoon of the day on which the policy was written the elevator in which plaintiff's grain was stored was burned, and the agent who afterward wrote the policy had actual notice of the burning.

Held, That the policy was not intended to cover grain in the elevator which had been burned at the time the policy was issued, and that in such case, the fact that the two elevators were connected by a belt gallery 400 feet long would not justify a jury in finding that the insurance covered both buildings. Judgment for defendant entered. *Mead vs. Phoenix Ins. Co., Mass., S. J. C., Jan. 21, 1893.*

In this case the agent testified that when he had the policy filled out he intended to insure grain in the elevator which was still standing. And apart from this testimony it would be absurd to suppose that the agent understandingly issued a policy on grain in an elevator which his own eyes had just seen burned to the ground.

Rights Where Freight Has Been Injured in Course of Transportation.

A common carrier is bound to deliver the property which it undertakes to transport at the point of discharge safe and uninjured, at the peril of liability, except where the injury has resulted from some cause excepted in a contract (other than negligence), which is a matter for defense, the burden of proving which is upon the carrier. The consignee or owner has nothing to do but to show the injury, and the carrier becomes at once presumptively liable, and remains so until it shows that said injury resulted from an act of God, the public enemies, or from a cause from which it had exempted itself legally by a special contract. And it would seem to follow that whenever an injury has been done to goods while in the

custody of a common carrier, the consignee or true owner has the right of action against the carrier. But it is the duty of a consignee whose property is injured while in the control of a carrier to pay all the freight charges, and then sue the carrier for the injury done. Though the property is damaged, while in the charge of a common carrier, to a greater extent than the bill for freight, the lien of the carrier is extinguished; and the consignee not only has the right to demand the property of the carrier without payment of the freight charges, but retention by the carrier amounts to a conversion, for which an action will lie.—*Miami Powder Co. vs. Port Royal & W. C. Ry. Co., Supreme Court of South Carolina, 16 S. E. Rep.*

OBITUARY

J. W. Richardson, grain dealer at Greenwich, O., is dead.

A. C. Paulsell, commission grain dealer at Stockton, Cal., is dead.

A. J. W. Stevens, grain dealer and member of the Baltimore Corn and Flour Exchange, is dead.

Anderson Finch, grain dealer and banker at Maysville, Ky., died recently of consumption at Thomasville, Ga., aged 45 years.

William Jones of Jones & Kinne, grain dealers at Ovid, N. Y., is dead. Besides his interest in the grain business he conducted a milling business of his own.

John Warner, of the grain and grocery firm of Hiestand, Warner & Co., of Oakesdale and Olympia, Wash., died recently at Portland, Ore., of pneumonia.

F. A. Fisher, an old member of the New York Produce Exchange, died at his residence in Brooklyn, N. Y., recently, aged 80 years. He was at one time a large operator in grain.

Uriah J. Colby died at his home in Chicago, March 27, aged 57 years. He was born at Talmeth, N. H., and passed his boyhood in Maine, where his father was a Methodist minister. In 1864 Mr. Colby came to Chicago and became connected with the packing and provision business but of late years devoted his time to the grain trade. On the Saturday before his death, while on the floor of the Board of Trade, of which he had been a member for 29 years, Mr. Colby was so overcome by excitement that he fell in a fit. He was highly respected by all.

Samuel C. Bartlett of S. C. Bartlett & Co., Peoria, Ill.; of Bartlett, Keuhn & Co., Evansville and Terre Haute, Ind., and of Bartlett, Frazier & Co., Chicago, Ill., and Buffalo, N. Y., died on the morning of March 19 at his home in Winnetka, a suburb of Chicago. Since last August he had been in ill health, but the nature of the disease, cancer of the liver, was not discovered until two weeks before his death. Mr. Bartlett was born at Peoria, Dec. 11, 1845. Since 1869 he had been in the commission grain business at Peoria, and once served a term as president of the Peoria Board of Trade. In 1889 the firm started in business at Chicago. Mr. Bartlett was a quiet man and a deep thinker. His general disposition won him many warm personal friends. He was an agreeable man to do business with and was popular with all classes. He leaves a widow and two sons aged 6 and 10 years.

Elijah K. Bruce, once prominent on the Board of Trade, died at his home in Chicago, April 6, at the age of 68 years. For years he had suffered from erysipelas which caused his end. Mr. Bruce was born at Lancaster, Erie Co., N. Y. Since 1869 he had resided in Chicago. In 1861 he became a member of Board of Trade. He was elected first vice-president of the board in 1868, having attained prominence as manager of the cash department of Munn & Scott. In the winter of 1869-70 the discovery that Munn & Scott had issued warehouse receipts for large quantities of grain which they did not have in store brought dishonor to the firm and Mr. Bruce severed all connection with them, retiring into comparative obscurity. In late years he was in reduced circumstances, and speculated in bucket shops in a small way. A subscription was taken up among the old members of the board to defray the funeral expenses.

EXPORTS OF CORN BY COUNTRIES.

During the eight months ending with February 27, 378,364 bushels of corn was exported, 11,034,565 bushels going to the United Kingdom, 3,061,938 to Germany, 413,999 to France, 3,921,953 to other countries in Europe, 2,280,502 to British North America, 5,296,428 to Mexico, 37,336 to the Central American states and British Honduras, 668,560 to Cuba, 11,314 to Puerto Rico, 5,346 to Santo Domingo, 355,063 to the other West Indies and Bermuda; 252,469 to South America, and 8,861 to other countries; in comparison with 45,894,350 bushels exported during the corresponding months of 1891-2, of which 22,930,038 went to the United Kingdom, 7,697,953 to Germany, 1,079,461 to France, 10,545,556 to other countries in Europe; 2,488,046 to British North America, 258,746 to Mexico, 73,750 to the Central American states and British Honduras, 280,759 to Cuba, 7,209 to Puerto Rico, 25 to Santo Domingo, 339,693 to the other West Indies and Bermuda, 175,936 to South America, and 17,443 bushels to other countries.

THE EXCHANGES

The rooms of the Baltimore Corn and Flour Exchange have been handsomely redecorated.

Memberships in the Minneapolis Chamber of Commerce have declined from \$400 to \$380.

Certificates of membership in the New York Produce Exchange are selling from \$650 to \$675.

By a vote of 785 to 154 the St. Louis Merchants' Exchange recently repealed the "corner rule."

The Duluth Board of Trade has voted to sell its present lot and building and erect another hall.

We are indebted to Geo. M. Lane, secretary of the Detroit Board of Trade, for a copy of his last annual report.

After Jan. 1, 1894, the annual membership fee of the Winnipeg Grain and Produce Exchange will be increased to \$20.

From April 15 to October 31 the Chicago Board of Trade will close at noon Saturdays. The vote on the question was overwhelming, 562 for and only 32 against. This is done on account of the World's Fair.

A strong fight is being made at Kansas City, Mo., over the appointment of the chief of the state grain inspection department in that city. W. A. Walker, chief inspector at present, is warmly supported for the new office.

The Superior Board of Trade has fixed the salaries of its employees as follows: Secretary, \$1,200 per year; chief inspector, \$85 per month; first weighman, \$50; other weighmen, \$45; telegraph operators, \$50. The force of weighmen will be increased.

As a remedy for the existing dullness in trade on the Montreal Corn Exchange it is proposed to establish a regular speculative board on the Chicago model. The plan is to transact the business in Montreal, not in grain for Montreal delivery, but in the speculative grades for Chicago delivery.

At a recent meeting of the Kansas City Hay Dealers' Association the action of the Missouri Pacific Railroad Company in compelling the handling of hay through the Hay Exchange was strongly condemned. Many of the dealers would like to have the privilege of delivery on team track continued.

At its annual election April 3 the Milwaukee Chamber of Commerce elected the regular ticket, as follows: President, F. H. Magdeburg; vice-presidents, Cassius M. Paine, J. W. Bass; secretary and treasurer, W. J. Langson; directors (for three years), G. J. Zimmerman, A. C. Seinn and George W. Powers; board of arbitration, A. G. Bodden, O. Z. Bartlett, James McAlpine, John F. Kern and John Foley, Jr.; board of appeals, C. F. Ilsley, E. H. Tchikiss, Oscar Mohr, E. E. Lewis and C. Manegold, Jr.; grain inspector, F. L. Hinkley; official weigher, F. F. Clapp.

A member of the Toronto Board of Trade a few months ago sold 10,000 bushels of grain to a Montreal firm when prices were lower than at present. Delivery of half was made, but the buyer has been unable to obtain the other 5,000 bushels as per the contract. When the injured firm sought redress from the Toronto Board of Trade it was informed that the rules of the board provide for the settlement of disputes between members only, and that there is no reciprocity between the Boards of Trade of the Dominion of Canada in the matter of arbitration.

Brewers' grains have been found equal to oats, pound for pound, as feed for horses by the City Railroad of New Brunswick, N. J. The cost of feeding brewers' grains is 5 cents less per day than the cost of oats.

The stocks of grain in warehouses at San Francisco, Cal., on March 31, were 1,493 tons of wheat, 10,960 tons of barley, 3,295 tons of corn and 2,400 tons of oats, according to the report of G. A. Abel, grain inspector of the San Francisco Produce Exchange. In addition there was 50,211 tons of grain at Port Costa and 28,720 tons at Stockton, making a total of 80,424 tons of grain in California Board Warehouses, against 65,823 tons a year ago.

In January we exported 1,514,336 bushels of corn to the United Kingdom, 199,991 bushels to Germany, 137,300 bushels to France, and 673,434 bushels to other countries in Europe; against 7573,952 bushels to the United Kingdom, 2,123,544 bushels to Germany, 348,947 bushels to France, and 3,290,158 bushels to other countries in Europe, in January last year. For the seven months ending with January our exports of corn were 8,771,548 bushels to the United Kingdom, 2,766,145 bushels to Germany, 309,258 bushels to France, and 2,290,158 bushels to other countries in Europe; in comparison with 18,016,143 bushels to the United Kingdom, 4,014,721 bushels to Germany, 460,572 bushels to France, and 7,359,077 bushels to other countries in Europe for the corresponding period of 1891-92.

LATE PATENTS

Issued on March 7, 1893.

ROTATING GRAIN METER.—Abraham B. Landis, Waynesborough, Pa. (No model.) No. 492,869. Serial No. 439,035. Filed July 5, 1892.

GRAIN CONVEYOR.—John B. Stoner, New York, N. Y. (No model.) No. 492,879. Serial No. 403,759. Filed Aug. 26, 1891.

GRAIN SCOURER.—Archibald P. Campbell, Portage la Prairie, Canada (No model.) No. 493,065. Serial No. 433,135. Filed May 16, 1892.

Issued on March 14, 1893.

AUTOMATIC GRAIN SCALE.—Marshall B. Lloyd, Minneapolis, Minn., assignor of one half to Edward H. Holbrook, Jr., same place. (No model.) No. 493,275. Serial No. 443,102. Filed July 21, 1890. Renewed Aug. 15, 1892.

HORSE POWER.—John R. Terrell and William E. Frasier, Osceola, Tex. (No model.) No. 493,370. Serial No. 452,534. Filed Nov. 19, 1892.

GRAIN CLEANER OR OAT SIFTING MACHINE.—Nathan B. Higbie, Chicago, Ill. (No model.) No. 493,429. Serial No. 434,034. Filed May 23, 1892.

GRAIN CLEANING MACHINE.—Thomas A. Seip, Dayton, assignor of one-half to Peter B. Holly and Christian A. Salzman, Hamilton, O. (No model.) No. 493,451. Serial No. 442,896. Filed Aug. 12, 1892.

METHOD OF POLISHING RICE.—Joseph Menge, New Orleans, La. (No model.) No. 493,509. Serial No. 455,061. Filed Dec. 13, 1892.

GRAIN SCOURING MACHINE.—Dennis E. Sihley, Chicago, Ill., assignor to James A. Sibley, same place. (No model.) No. 493,603. Serial No. 448,946. Filed Oct. 15, 1892.

CAR MOVER.—Solomon C. Chase, North Baltimore, O. (No model.) No. 493,613. Serial No. 458,131. Filed Jan. 12, 1893.

Issued on March 21, 1893.

CAR STARTER.—Jacob Ripberger, Newton, Ky., assignor of one-half to Charles M. Mcne, Cincinnati, O. (No model.) No. 493,736. Serial No. 453,648. Filed Nov. 30, 1892.

CONVEYOR.—Richard L. Hassell, Chicago, Ill. (No model.) No. 493,772. Serial No. 426,036. Filed March 23, 1892.

HORSE POWER.—William M. Lewis, New Hartford, Ia. (No model.) No. 493,827. Serial No. 451,219. Filed Nov. 7, 1892.

HAY PRESS.—Lawrence F. Gressett, Ballinger, Tex. (No model.) No. 493,996. Serial No. 447,632. Filed Oct. 3, 1892.

ROTATING GRAIN WEIGHER.—Benjamin Simons, Charleston, S. C. (No model.) No. 494,035. Serial No. 436,752. Filed June 14, 1892.

Issued on March 28, 1893.

GAS ENGINE.—John Foss and Charles F. Endtner, Springfield, O., said Endtner assignor to said Foss. (No model.) No. 494,134. Serial No. 396,230. Filed June 15, 1891.

CARRIAGE FOR GRAIN SPOUTS.—Edward D. Mayo, Minneapolis, Minn., assignor of one-half to the Barnett-Record Co., same place. (No model.) No. 494,153. Serial No. 443,551. Filed Aug. 18, 1892.

GRAIN DOOR FOR CARS.—Alvin C. McCord, Chicago, Ill. (No model.) No. 494,220. Serial No. 438,949. Filed July 5, 1892.

BALING PRESS.—Carlos G. Wilson, Milledgeville, Ga. (No model.) No. 494,267. Serial No. 416,192. Filed Dec. 26, 1891.

GRAIN SEPARATING SCREEN.—Charles Closs and Jacob Closs, St. Ansgar, Ia. (No model.) No. 494,290. Serial No. 429,414. Filed April 16, 1892.

Issued on April 4, 1893.

HORSE POWER.—Michael W. Bowser, William H. Smawley and Peter Mullin, South English, Ia. (No model.) No. 494,545. Serial No. 445,688.

COMPUTING SCALE BEAM.—Frank M. Daniels, Traverse City, Mich. (No model.) No. 494,552. Serial No. 432,652. Filed May 11, 1892.

BALING PRESS.—Moses C. Nixon, Omaha, Neb. (No model.) No. 494,686. Serial No. 407,572. Filed Oct. 2, 1891.

BALING PRESS POWER.—Ephraim C. Sooy, Kansas City, Mo., assignor to the Kansas City Hay Press Co. of Missouri. (No model.) No. 494,794. Serial No. 440,399. Filed July 23, 1892.

SEED COTTON CLEANER AND CONVEYOR.—Ferdinand E. Smith, Birmingham, Ala., assignor to the Smith Sons' Gin and Machine Co., same place. (No model.) No. 494,902. Serial No. 451,466. Filed Nov. 9, 1892.

BALING PRESS.—John W. Brown and Albert A. Gehrt, Quincy, Ill., assignors to the Collins Plow Co., same place. (No model.) No. 494,915. Serial No. 397,627. Filed June 26, 1891.

BALE PRESS.—Benjamin Fitzpatrick and Henry C. Boatright, Wetumpka, Ala. (No model.) No. 494,920. Serial No. 431,730. Filed May 28, 1892.

APPARATUS FOR DRYING MALT.—George Portz, Hartford, Wis. (No model.) No. 494,437. Serial No. 427,800. Filed April 5, 1892.

PRESS COMMENT.

THE ART OF GRAIN MIXING.

In mixing grain bought in the market both good judgment and knowledge of grain must be combined. If it is taken for granted that grain coming from storage houses is all that it is said to be losses will sometimes occur, for the art of grain mixing is as well known to elevator managers nowadays as to millers. To mix a grade of supposed hard wheat—which in reality has a trace or more of some other—with a special grade of soft wheat, means mischief. A small percentage amiss in mixing grain makes a wide difference in its flour and only careful millers with keen eyes perceive this in time. —*Commercial Review.*

INJUN MEAL ABROAD.

American corn marches triumphant hand in hand, or ear in ear, as it were, with the American hog through Europe. Germany was conquered last summer by the Hon. Charles J. Murphy of the United States Department of Agriculture; conquered so completely that Murphybrod, as the Germans learned to call corn bread, has become one of the most popular and widely used foods in the empire. Now Mr. Murphy is giving banquets in Denmark for the same purpose, banquets composed of eight dishes and one drink made of corn. It is a great enterprise and will unquestionably result in great benefit to the American producer and the European consumer. —*Chicago Post.*

POLICY OF THE CHICAGO BOARD OF TRADE.

A New York paper quotes a member of the Produce Exchange in that city as saying it is impossible for outsiders to work a successful corner in Chicago. The policy of the Chicago Board of Trade always has been to favor the making of Chicago a market for the greatest possible quantity of produce consistent with a proper conduct of the business, which includes due regard to the rights of persons owning the property. If at any time this has not been its policy the board was then acting contrary to the declared objects of its organization, and if it has favored the running of a corner, except to the extent of insuring on the due performance of a contract, it has acted in opposition to the laws of the state and the good of its citizens. This without reference to whether a corner was attempted to be run by a member of the board or by an outsider. —*Chicago Tribune.*

TOO MUCH WHEAT.

The farmers of Minnesota are disappointed by the low price of wheat, as they are wherever wheat is produced to sell largely. There is too much wheat, which makes the low prices. Minnesota, the Dakotas, Washington and Oregon raise wheat to sell. They are beginning to produce other things, but mostly wheat is the crop, looked to for the cash. Southern Minnesota went out of wheat fifteen years ago. Now it is wealthy. Northern Iowa went out of wheat twenty years ago and the farmers are the principal depositors at the banks. It has been so in other states successively, and the Northern Pacific states, as well as the Northwestern states, will necessarily go over the same ground. The more rapidly they accept the inevitable, the sooner they will be independent of low wheat prices and rid of the poverty that is consequent upon them. —*Minneapolis Market Record.*

A REFORM NEEDED IN ELEVATING GRAIN.

As the opening of navigation will soon be here, when shipments of grain will be resumed from this port, it is of paramount importance that the old and unsatisfactory system of elevating grain here should undergo a thorough reformation, and be placed upon a footing that will insure our dealers and exporters better protection against the excessive shortages that have occurred for many years past, after the delivery of grain to the Montreal Elevating Company. So far as the majority of our shippers know, there is no indication that the elevating company intends to pursue any different policy from that which has obtained in the past; and consequently they feel that they are about to enter upon another season with the same insecurity against shortages as ever, notwithstanding the agitation that has been going on regard-

ing the great necessity of the Montreal Elevating Company employing sworn weighers, in the interest of the public, and also for an improvement in the working of the automatic register system —*Trade Bulletin, Montreal.*

ANTI-OPTION BILL FAVORABLE TO BULL MOVEMENT.

The bull pool at Chicago has not been able to advance the price of wheat generally as yet. Known supplies and the "law of demand and supply" are too much for them and their millions. The anti-option law, if passed, would not have prevented any man from buying as much wheat as there is in the country, providing he could find anyone to sell it to him and he had money or security to pay for it. As it is now, short sales have practically checkmated every move of the would-be cornerers of wheat in Chicago—sales by those wicked bears concerning whom Farmer Hatch and Senators Washburn and George told us so much. The remedy for attempts to corner foodstuffs will be found in the remedy for that part of human nature which leads a man to try to purchase that which he has reason to think will be or he can make worth more in the near future. The failure of the would-be cornerers of wheat, which is almost assured in advance, will result in a heavier (financial) punishment than any court could inflict. —*Bradstreet's.*

STATE TRANSFER ELEVATORS FOR NEW YORK.

Capt. M. De Puy is actively stirring up the elevators again, writes the Buffalo correspondent of the *United States Miller*. He is after the legislators with a bill providing for two floating elevators, which are to charge 1 cent per bushel for unloading and loading canal grain. Of course the state is to furnish and maintain these floaters. He claims it would pay handsomely for the small amount required to build these elevators. Now, if there is any money in it, why do not the canalers or boat owners buy a few floaters and do the work themselves? The scheme of doing this has evidently fallen through again and De Puy wants the taxpayers to help him and a few of his kind out of paying a reasonable charge for transferring grain. Everybody who knows anything about the management of state institutions is aware that it would cost the state fully 1 cent per bushel to do the work and perhaps a fraction more. De Puy, go help yourself.

HOW TO SECURE GOOD TIN ROOFS.

Action has recently been taken by the metal roofers in one or two prominent centers of trade, to secure a discrimination in favor of good roofing upon the part of the architects. Their petition is, instead of the roofing contract being included with other work in the bid of the general contractor that it be given out as a separate part by the architect, thus making the roofer responsible to the architect and house owner instead of being responsible to the builder. This movement, which in various quarters has the approval of all who are interested in good roofs, has its origin in the abuses which have grown up in the roofing trade under the existing plan. At present if a builder secures a contract for putting up a building, including the roofing, his desire is to let the roofing to the lowest bidder in order to make the largest amount of money possible. Connivance between roofer and builder very easily thwarts the efforts of the architect to secure a good roof. The architect, assuming that he wants a good roof, is, under these conditions, at a great disadvantage. By making the roofer responsible directly to the architect the element of uncertainty and the opportunity for mismanagement for which the general builder is responsible would be removed.

There is at present a crisis in the metal roofing trade. The quality of metal that is being very generally used at the present time is so poor that it means that tin roofs will soon be driven out of the market unless a change for the better takes place. Tin roofs deserve to be driven out of the market if poor plates are to be used. Nor are the roofers of the country entirely free from blame in this matter. In putting blame upon the general builder we do not relieve the roofer from the responsibility which justly attaches to him. When tanners are calling for wasters weighing so little as 80 pounds to the box in place of using primes weighing 111 pounds to the box, or upward, a state of affairs existing at the present time, it shows the depths of degradation to which this trade has been reduced in many parts of the country. It means that tanners are using an article that is inferior to slag roofing, poorer than the worst of tar roofing, less desirable, in fact, than a dozen other despised forms of roofs with which they are in competition. —*Metal.*

The crops of Manitoba for 1892 are estimated by the Minister of Agriculture to have been as follows: Wheat 14,500,000 bushels, an average of 16½ bushels per acre; oats 11,500,000 bushels, an average of 35 bushels per acre; barley 3,000,000 bushels, and potatoes 2,000,000 bushels.

The state of Minnesota loaned \$20,000 to Polk county wherewith to buy seed grain for poor farmers who were to return the value of the grain in two years. Some have failed to do this for various reasons and the county is short \$2,000, which loss falls on the whole community within the county.

RICE IN LOUISIANA.

Next to sugar, rice may be said to be the most important agricultural product of Louisiana, but with the existing depression in the trade the outlook for rice culture is not brilliant, says the New Orleans *Times Democrat*. Since the season of 1877-78 the product in this state has increased from 233,707 sacks of rough rice to something over 2,000,000. Unfortunately, the demand for rice has not kept pace with the increasing product, and this has caused such a depression in prices that the rice planting industry in Louisiana is threatened with a retrograde movement that cannot be regarded as otherwise than discouraging and even alarming.

There appears, however, to be a reasonable prospect of improving the situation by expanding the market through increased consumption. Were rice regarded throughout this country as a staple food product the demand would be so increased that the product of the rice fields not only of Louisiana, but of other rice growing states, would be readily marketable at remunerative figures. In this and other Southern states rice is largely used as an article of food, but outside of the South it is merely an article of luxury. It is made into desserts, and frequently makes its appearance on the table of the Northern consumers in puddings or blanc manges, but outside of the Southern states no housekeeper ever appears to think of its value as a substitute for potatoes, bread, cornmeal or oatmeal. It is through its use as a substantial food that the real value of rice must come to be properly understood, and any move having for its object the popularization of rice as a staple article of food is deserving of the warmest support, not only of the rice planters, but of everyone interested in the financial prosperity of this and other Southern states.

To aid the reader to a suitable appreciation of the gravity of the situation a glance at the following figures, showing the increase of rice growing in Louisiana, will be of value. The figures quoted show the increase of rice receipts in New Orleans for fifteen years ending with last season:

	Rough sacks.	Clean bbls.		Rough sacks.	Clean bbls.
1877-78.....	233,707	16,682	1885-86.....	889,212	57,983
1878-79.....	279,611	21,045	1886-87.....	838,476	48,566
1879-80.....	182,999	11,152	1887-88.....	626,811	23,263
1880-81.....	445,397	29,812	1888-89.....	737,075	29,227
1881-82.....	435,692	39,390	1889-90.....	777,742	7,441
1882-83.....	302,750	37,736	1890-91.....	892,374	4,115
1883-84.....	459,559	41,055	1891-92.....	1,052,331	5,640
1884-85.....	333,693	32,333			

B. & O.'S NEW THROUGH LINE.

PREPARING FOR THE IMMENSE TRAFFIC INCIDENT TO THE WORLD'S FAIR.

The management of the Baltimore & Ohio Railroad is preparing for an immense business in 1893 while the World's Fair is open in Chicago. The terminals at Chicago are capable of accommodating a much heavier traffic than is now being done, and important changes are being arranged for the handling of very heavy freight and passenger business to the West from New York, Philadelphia and Baltimore. New equipment for largely increased passenger business and an extensive stock of freight cars have been ordered. The various roads of the system will be improved by straightened lines, reduced grades, extra side tracks, and interlocking switches. The new line between Chicago Junction and Akron has shortened the distance between Chicago and tidewater twenty-five miles, and between Pittsburgh and Chicago fifty-eight miles.

The distance between Chicago and Pittsburgh and Chicago and Cleveland by the construction of the Akron line and the acquisition of the Pittsburgh & Western line and the Valley Railroad of Ohio is about the same as via the Lake Shore from Cleveland to Chicago, and by the Pennsylvania from Pittsburgh to Chicago. The alignment is to be changed and grades reduced to a maximum of twenty-six feet. It is expected that within twelve months the old Baltimore & Ohio through line between Chicago and the Atlantic Ocean will have passed away and the new line via Pittsburgh be established, with no greater grades or curvature than on any of the trunk lines.

Work has already begun east of Pittsburgh to meet improvements making west of Pittsburgh. These improvements will consist of additional second and third tracks, a general correction of the alignment, and completion of the double track on the Metropolitan Branch. It is expected that the new through line will be ready simultaneously with the completion of the Belt Line through the city of Baltimore, which is intended to unite the Washington branch with the Philadelphia division and do away with the present line via Locust Point. Forty new and powerful locomotive engines were added to the equipment during the last two months, and others are in process of construction. The permanent improvements now under way and in contemplation involve the expenditure of some \$5,000,000.—*Baltimore American*.

Bad roads have no terrors for the Minnesota farmer who took a load of hay to the town of Northfield recently. He placed the hay on a pair of bob sleds and then fastened another pair of sleds on top of the load so that when the hay tipped over it struck on the top sleds and was ready to go on. It was but the work of the moment to hitch the team and pursue the even tenor of his way. The sheriff is looking for the smart man, who also weighed in one pair of sleds to the man who bought the hay.

IMPORTS OF RICE.

In February we imported 15,954,194 pounds of rice, rice flour, rice meal and broken rice, against 6,839,861 pounds in the preceding February; and 91,472,332 pounds, valued at \$1,648,731, in the eight months ending with February; against 81,714,581 pounds, valued at \$1,527,667, in the corresponding period of 1891-2. The imports of rice from the Hawaiian Islands in February were 454,000 pounds, against 744,200 pounds in the preceding February; and during the eight months 7,329,500 pounds, against 4,844,600 pounds during the corresponding period of 1891-2.

We exported 783,682 pounds of rice, rice flour, rice meal and broken rice in February, against 468,785 pounds in the preceding February; and 6,680,820 pounds, valued at \$136,694, during the eight months ending with February; against 6,452,555 pounds, valued at \$124,387, during the corresponding period of 1891-2. In addition 550 pounds of Hawaiian rice was re-exported in February, against 540 pounds in February, 1892; and 55,019 pounds, valued at \$1,533, in the eight months ending with February; against 14,150 pounds, valued at \$484, in the corresponding period of 1891-2.

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DAVIS GRAIN TABLES.—These tables give the value of any number of bushels of produce weighing 60 pounds to the bushel from 25 cents to \$1.25 per bushel, and the value of any produce weighing 32, 48 and 56 pounds to the bushel at 15 cents to \$1.50. The book also contains Davis' Dockage Table which gives the amount to dock any load of wheat up to 600 bushels at 1½ to 5 pounds dockage. The book contains 219 pages of tables, printed on good paper, with large type, and well bound in cloth. The book is a new publication, and the arrangement of the tables is much more convenient than in some of the old publications. Price.....\$1.25

CLARK'S GRAIN TABLES.—This work is published in several different forms, for use in different lines of business. In these tables pounds are reduced to bushels, so that a buyer can quickly determine the correct number of bushels in a load without doing any figuring. Their use effects a saving every day of more than time enough to pay for them. The edition intended principally for reducing team scale weights to bushels contains nine tables, and is bound in paper. Price 50 cents. This will be found invaluable to country buyers. A new edition, intended for shippers and commission merchants, reduces any quantity up to 64,000 pounds to bushels. It contains sixteen tables, and is neatly bound in cloth. Price.....\$1.50

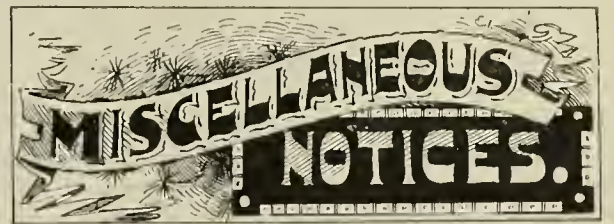
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MITCHELL BROS. Co., 184 and 186 Dearborn street, Chicago, Ill.

IMPORTS AND EXPORTS OF HAY.

In February the imports of hay were 9,070 tons, against 9,435 tons in the preceding February; and in the eight months ending with February the imports were 55,344 tons, valued at \$505,955; compared with 51,775 tons, valued at \$434,498, in the corresponding period of 1891-2. No foreign hay was re-exported in the eight months ending with February, against 102 tons, valued at \$926, in the corresponding period of 1891-2.

The exports of hay in the month of February were 3,221 tons, against 3,314 tons in February, 1892; and during the eight months ending with February the exports were 23,454 tons, valued at \$373,366; in comparison with 22,395 tons, valued at \$373,292, during the corresponding period of 1891-2.



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Clear timber land in South in tracts to suit, houses and lots anywhere in the country, for sale and trade. Send description of what you have for an offer. Address

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MAN WANTED TO TAKE CHARGE OF ELEVATOR.

We want a competent man to take charge of an elevator in Indiana. One who is familiar with gas engines and thoroughly posted on Toledo and seaboard grades. Address

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Kingsley's Directory is the only complete work containing the name and address of every firm engaged in the following lines of business: Grain, milling, flour and feed, hay and straw, butter and eggs, fruit and produce, malting, brewing, distilling and poultry. New edition, thoroughly revised. Over 500 pages octavo, substantially bound in cloth. Indispensable to those who wish to reach the lines of business named above.

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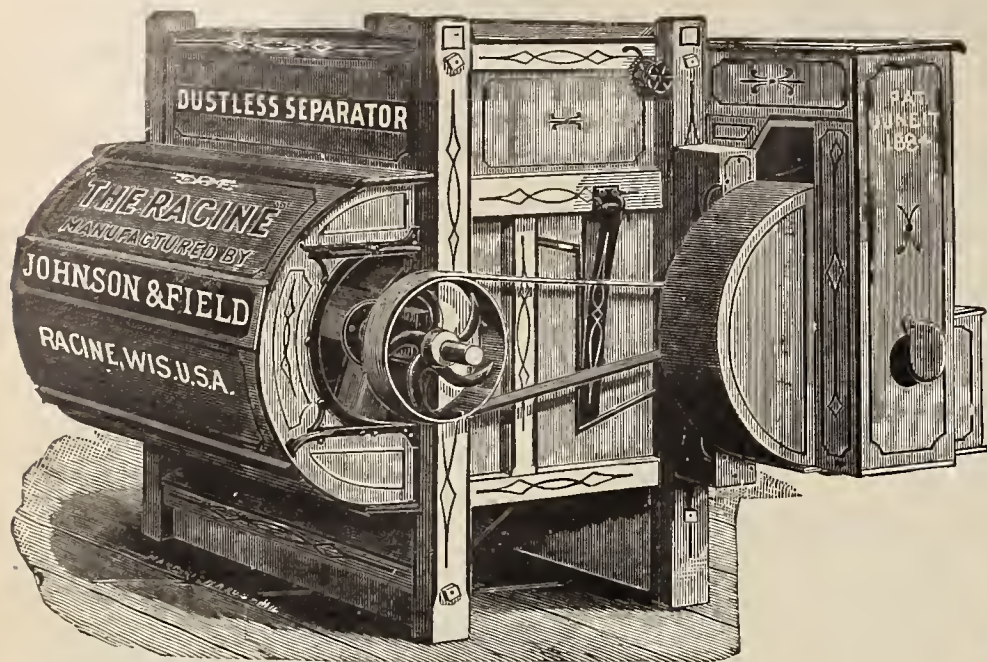
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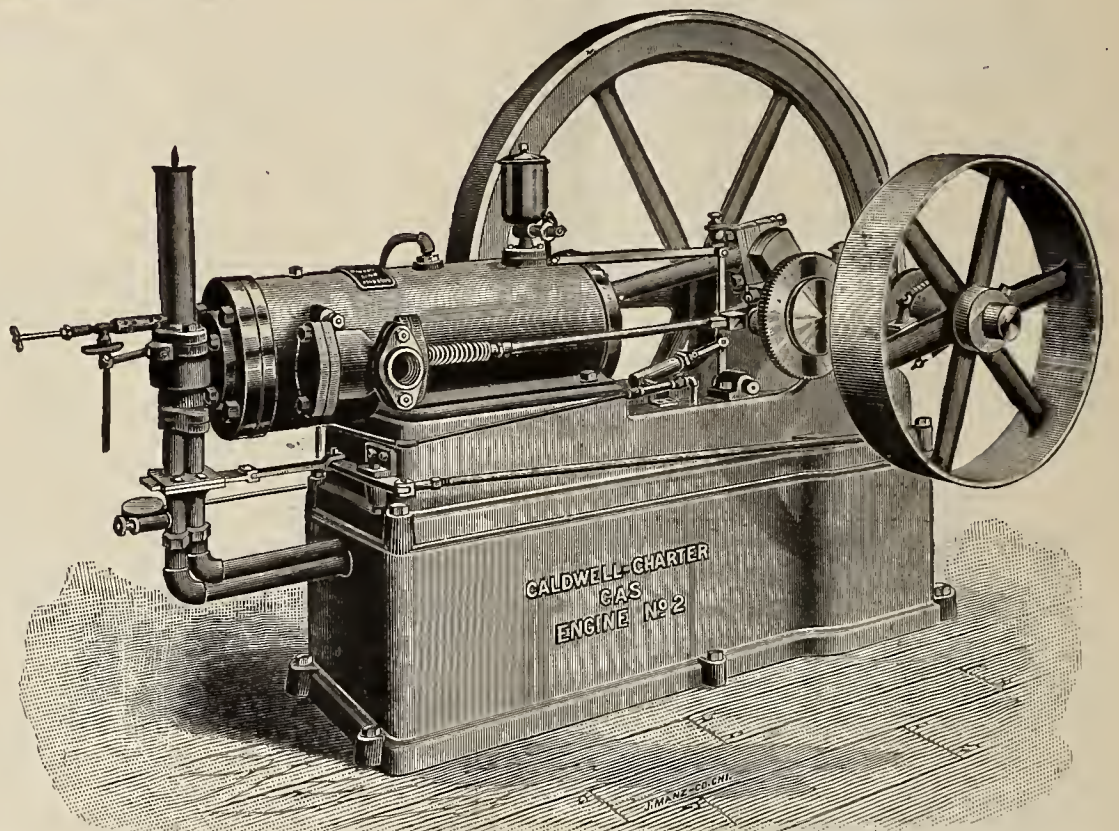
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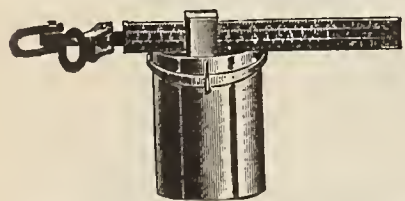


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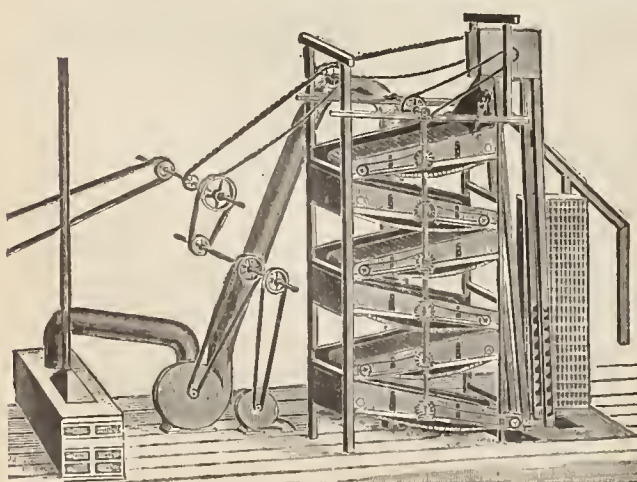
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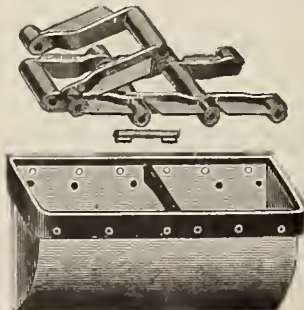


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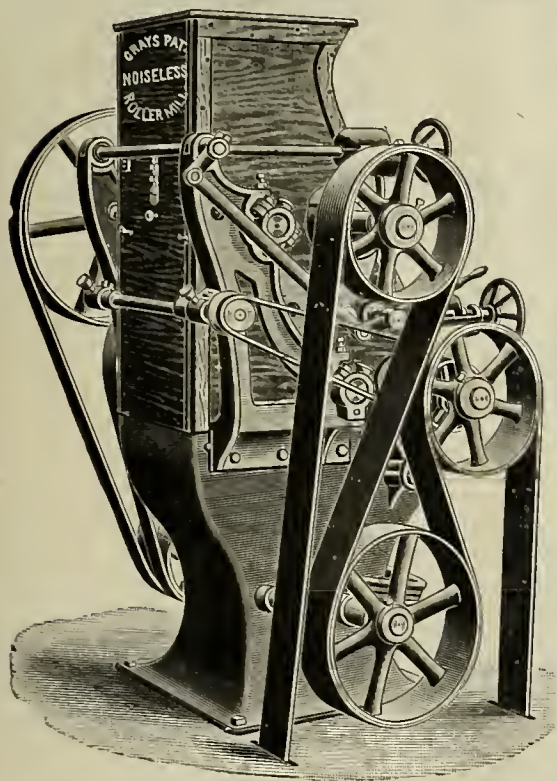
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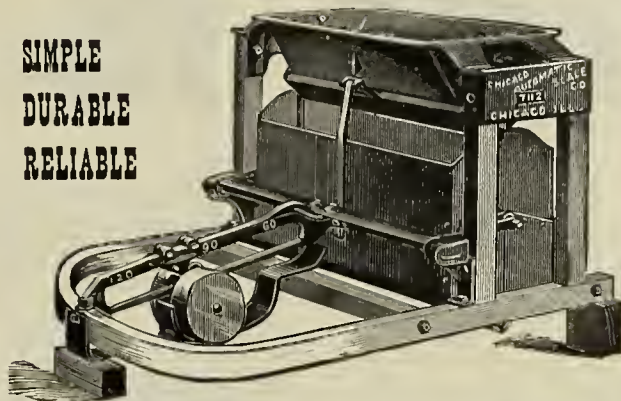
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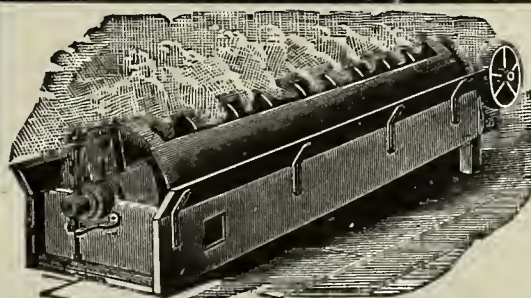
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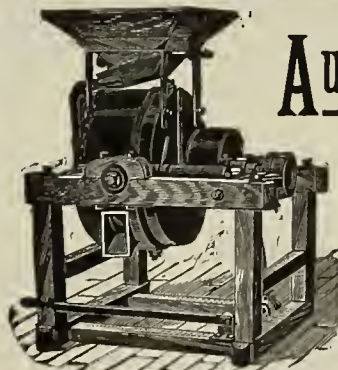


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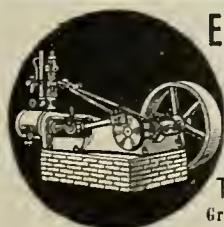
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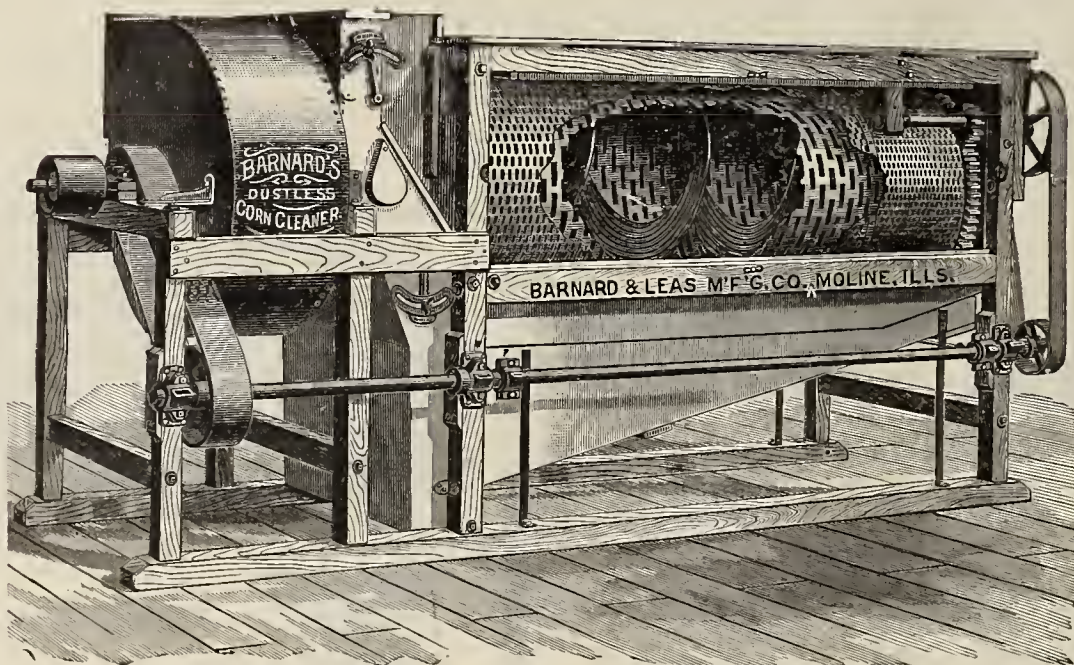
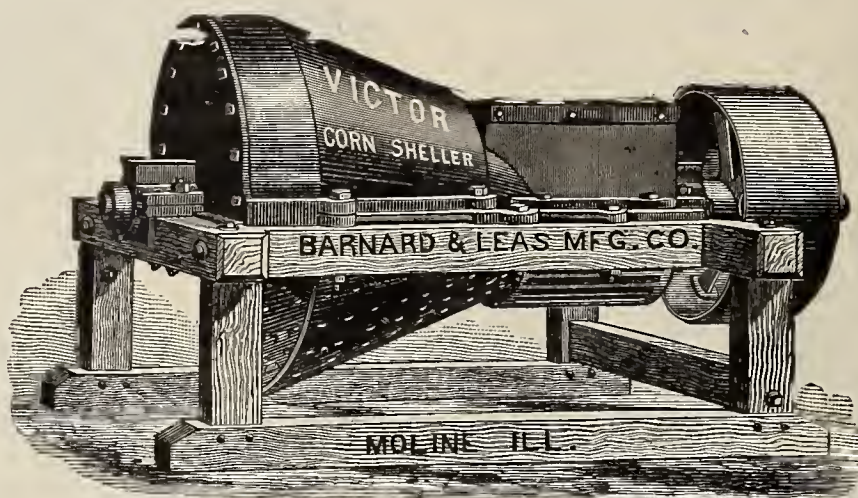
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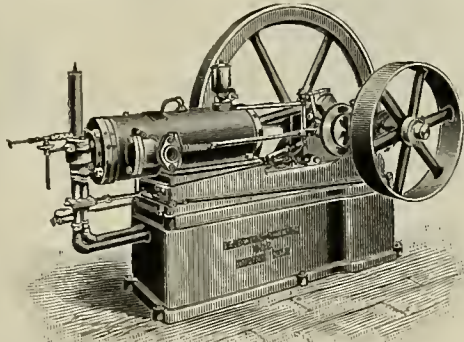
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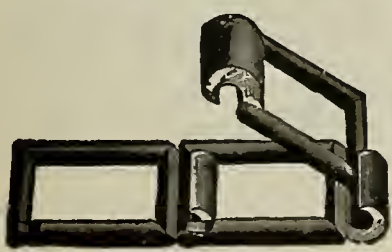
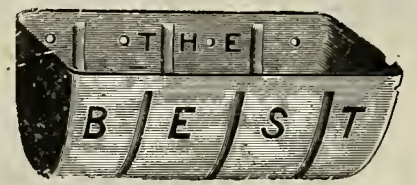
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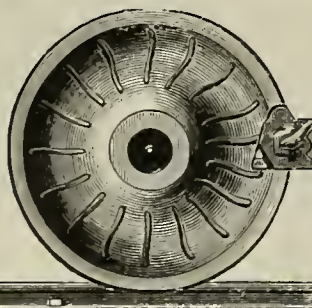
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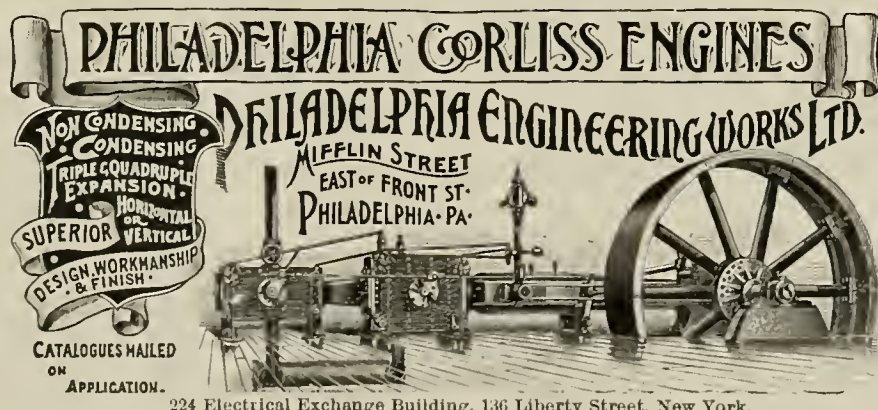
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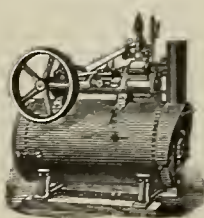
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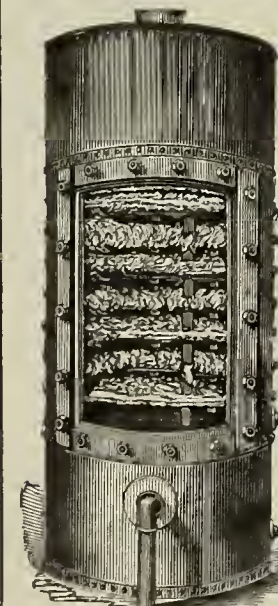
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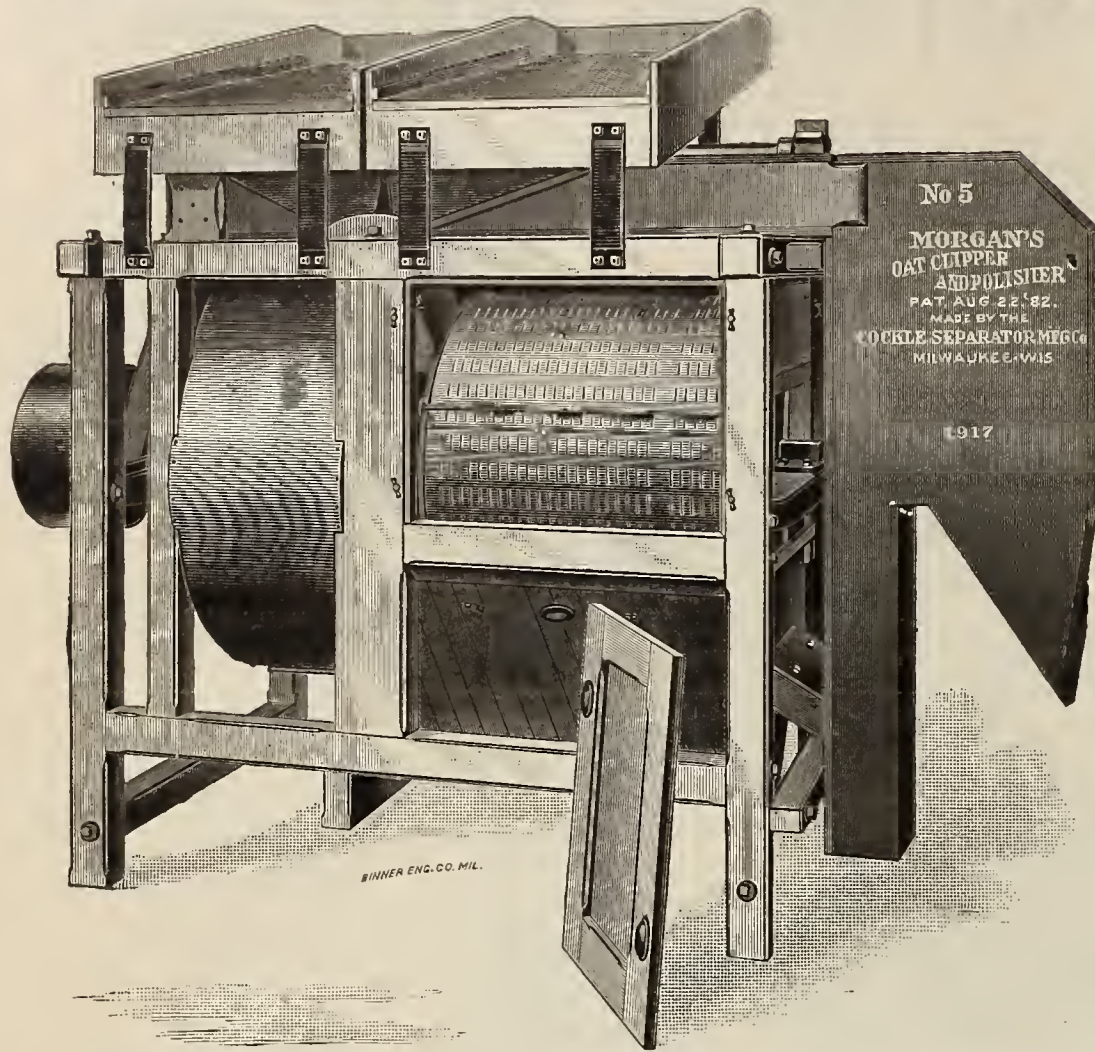
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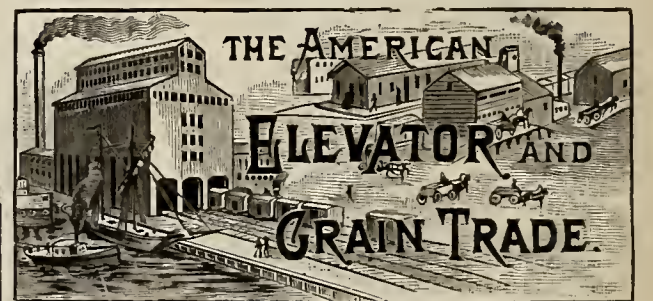
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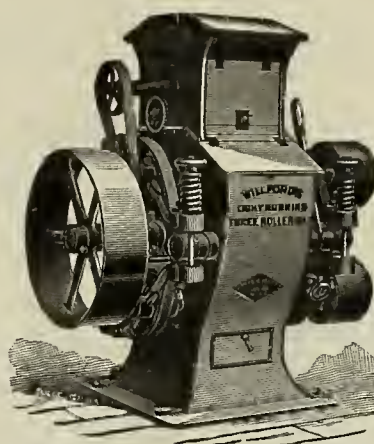
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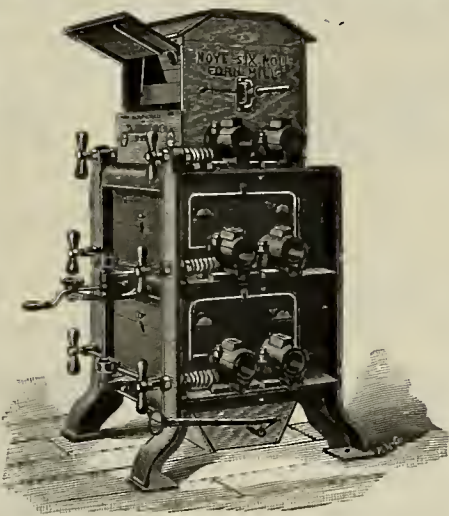
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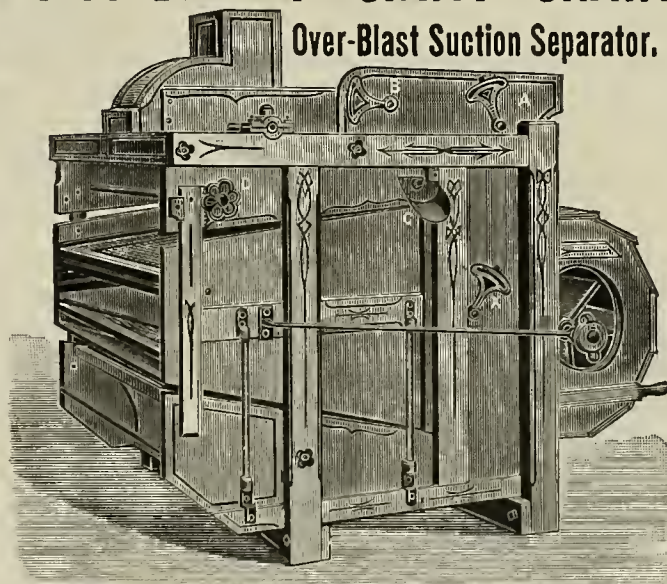
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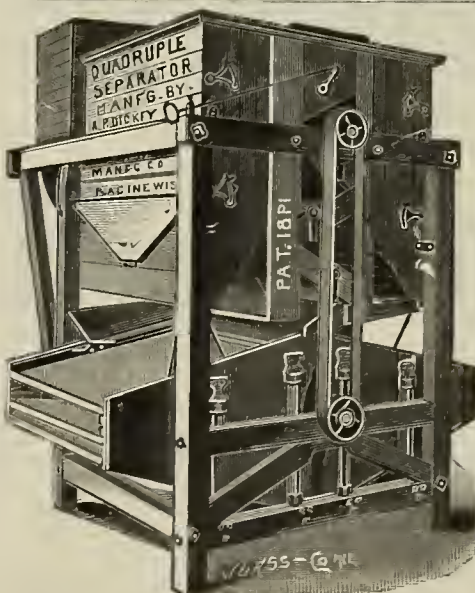
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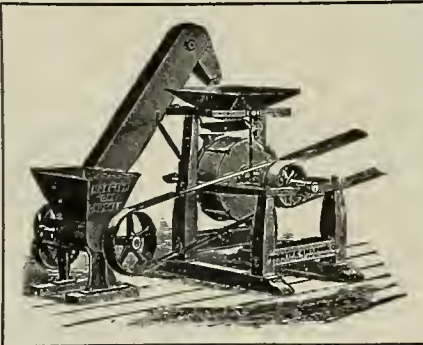
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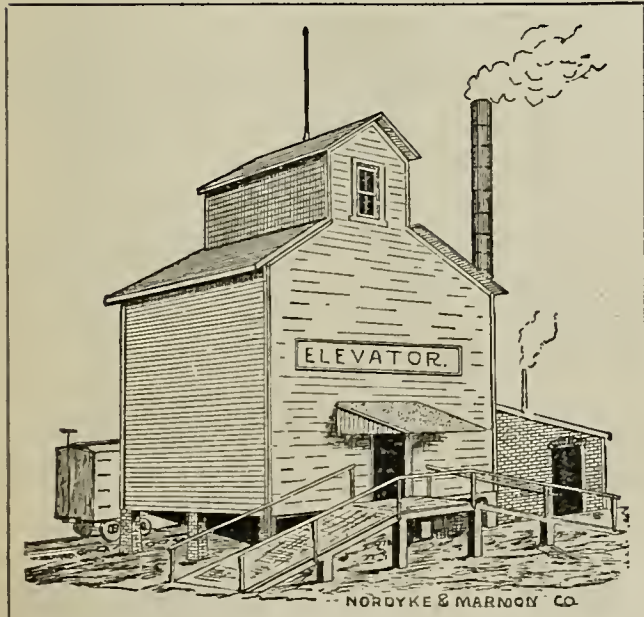


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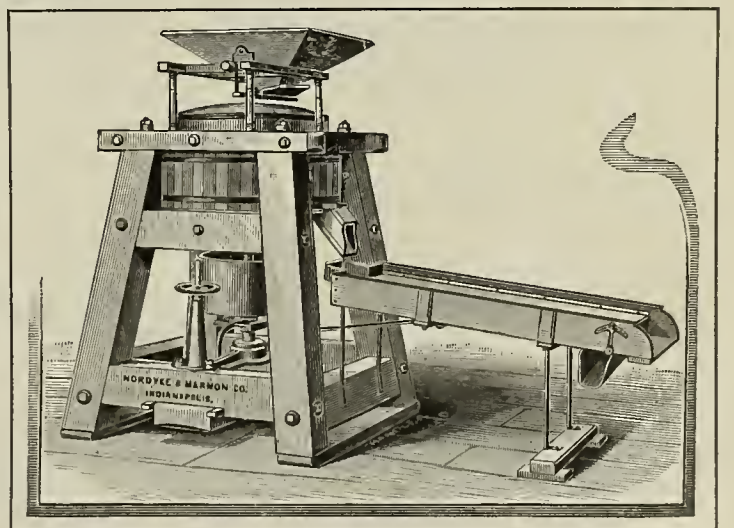
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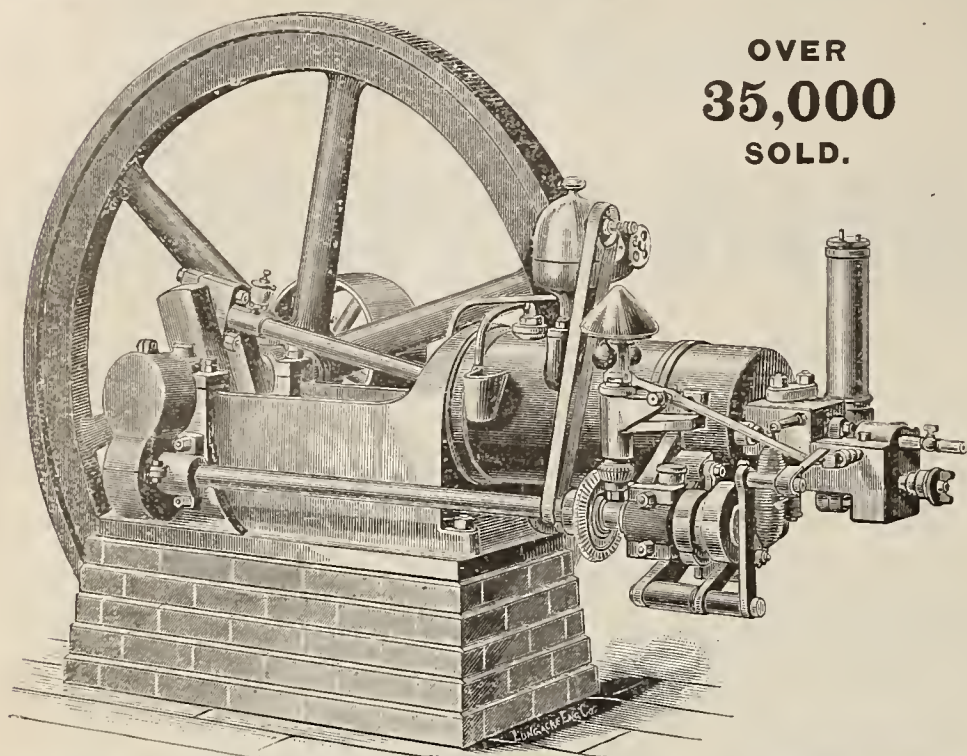
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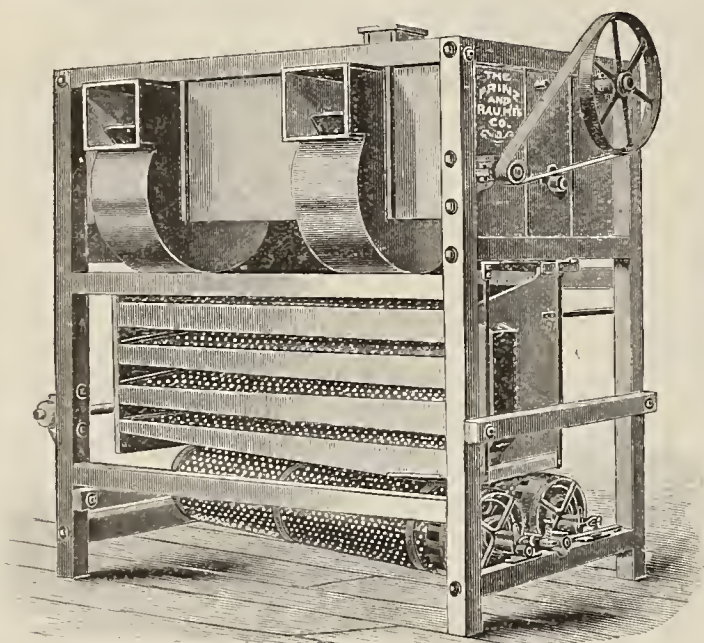
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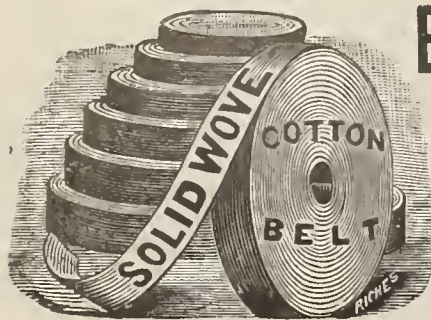
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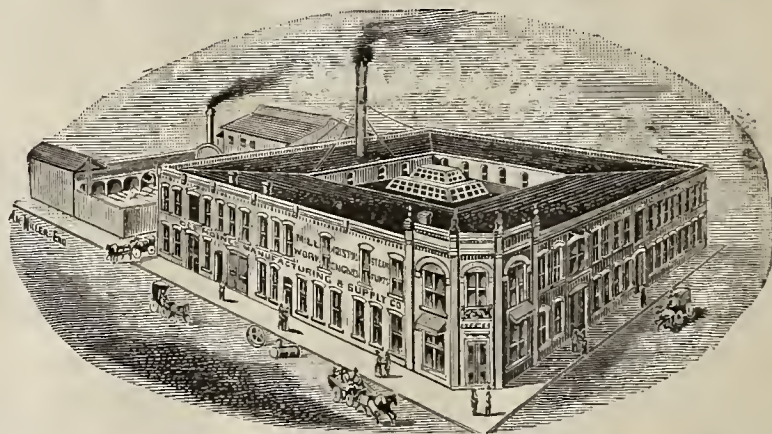
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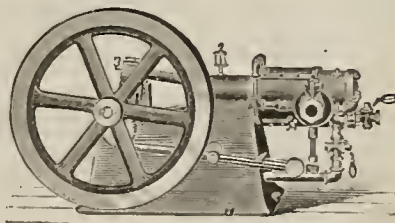
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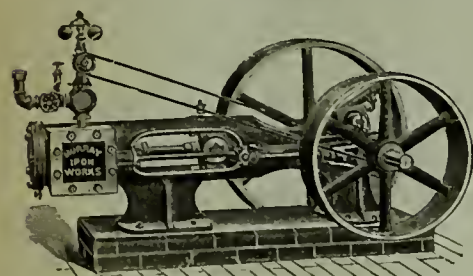
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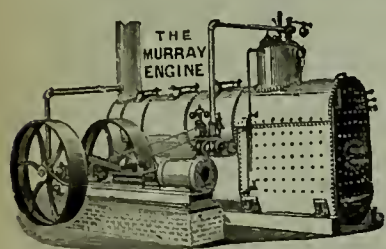
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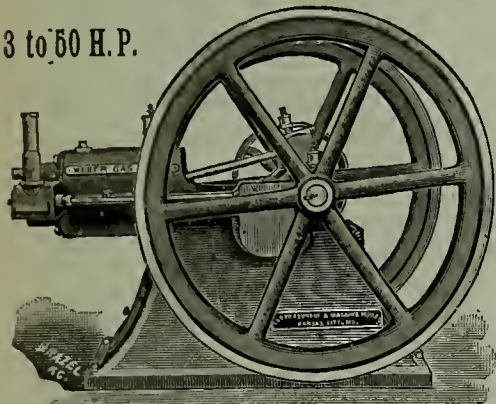


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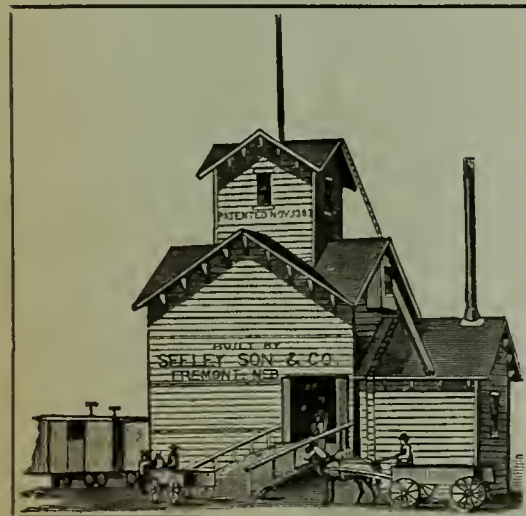
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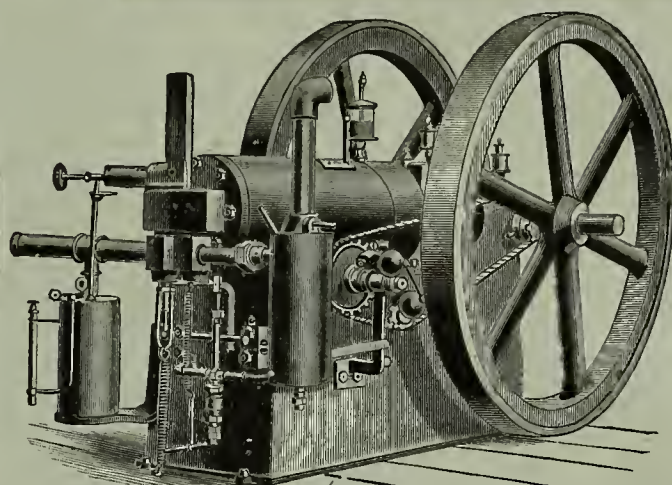
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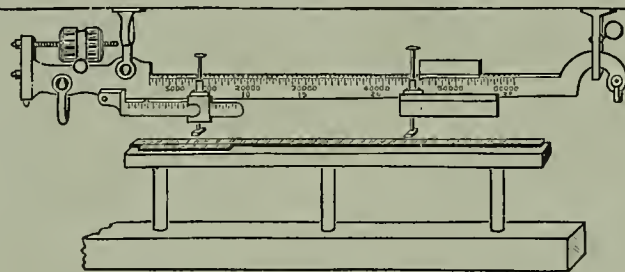
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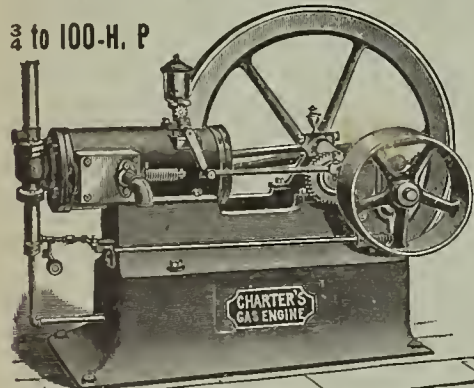
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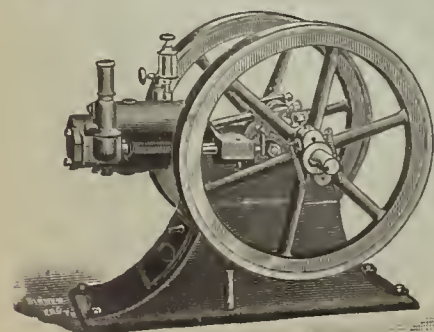
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